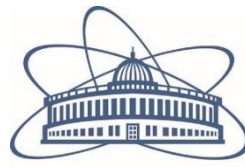




Innovation and Digital
Development Agency



JOINT INSTITUTE
FOR NUCLEAR RESEARCH



**INNOVATION AND DIGITAL DEVELOPMENT AGENCY,
MINISTRY OF DIGITAL DEVELOPMENT AND TRANSPORT**

**VEKSLER AND BALDIN LABORATORY OF HIGH ENERGY PHYSICS,
JOINT INSTITUTE FOR NUCLEAR RESEARCH**

**INSTITUTE OF RADIATION PROBLEMS,
MINISTRY OF SCIENCE AND EDUCATION**

CIRRICULUM VITAE and PUBLICATION LIST

Ramil A. Akbarov

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Digital Development and Transport, Azerbaijan, Baku, AZ1069, Azerbaijan

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PERSONAL INFORMATION

| | |
|-----------------------|---|
| Name | Ramil |
| Surname | Akbarov |
| Address | Azerbaijan, Baku, Sabunchu reg., Kurdakhani vil. |
| e-mails | ramilakbarov@gmail.com akbarov@jinr.ru |
| Google Scholar | https://scholar.google.com/citations?hl=ru&user=518P4YEAAAJ |
| Date of birth | 06.11.1989 |

PERSONAL STATEMENT

Since 2016, I have been actively involved in research on silicon micropixel avalanche photodiodes (MAPD, SiPM). During my practice, I mastered the operation of devices that allow me to study the characteristics of photodiodes and conduct experiments. Gained experience in assembling diodes in housings with subsequent measurement of their main parameters. Participating in the development of prototypes of scintillation detectors based on micropixel lava photodiodes.. During my time in this field, I have authored and co-authored dozens of publications on MAPD. Currently, I am researching the radiation resistance of various

types of SiPMs, the temperature dependence of the main parameters of these diodes and the mechanisms for generating the output signal of silicon photomultipliers. In addition, our working group plans to take part in the development of detectors based on MAPD for the NICA project. I am also involved in training students, conducting practices to study the basic parameters of MAPD and methods of their measurement.

EDUCATION

09/2008 – 07/2012

Baku State University, Faculty of Physics | Baku, AZ1143 Azerbaijan

BSc: Division of Physics Education, Bachelor Program, Faculty of Physics, Physic.

09/2012 – 07/2014

Moscow Institute of Physics and Technology | Moscow, 117303, Russian Federation

MSc: Division of Physics Education, Master Program, Faculty of Physical and Quantum Electronics, Applied mathematics and physics.

01/2017 – Present

Institute of Radiation Problems, Ministry of Science and Education | Baku, AZ1143 Azerbaijan

Ph.D: PhD student, Radiation material science

EMPLOYMENT HISTORY

26/10/2014 – Present

Position: Scientific Researcher

Department: Innovation and instrumentation

Affiliation: Institute of Radiation Problems, Ministry of Science and Education, Baku, Azerbaijan

23/12/2014 – 23/11/2022

Position: Scientific Researcher

Department: The department of innovation and instrumentation

Affiliation: National Nuclear Research Centre of Ministry of Communications and High Technologies, Baku, Azerbaijan

10/01/2017 – Present

Position: Scientific Researcher

Department: Veksler and Baldin Laboratory of High Energies

Affiliation: Joint Institute for Nuclear Research, Dubna, Russia

23/11/2022 – Present

Position: Scientific Researcher

Department: Detectors and radiation applications division

Affiliation: Nuclear Research Department, Innovation and Digital Development Agency, Baku, Azerbaijan

ADDITIONAL SKILLS / RESEARCH INTEREST

My research interests:

- Radiation physics;
 - Detector physics:
 - Research and development of micropixel avalanche photodiodes (SiPM);
 - Development of detectors based on SiPM;
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COMPUTER SKILLS

| | |
|-----------------------------|---|
| Operational systems: | Windows and standard program set |
| Data analysis: | Origin Lab Pro, ROOT (little) |
| Simulation: | SRIM (little) |
| Electronics: | Proteus, Circuit Pro, Altium Designer (little) |
| Others: | SolidWorks, FL Studio, Adobe After Effects (little) |

CERTIFICATE

- Certificate of successful completion of the course " Altium Designer. Design and construction of electronic equipment"
-

PROJECTS AND COLLABORATIONS

I have participated in various training programs and collaborative projects with esteemed companies and institutions.

- Joint Institute for Nuclear Research (NICA), Russia
 - Zekotek Photonics, Canada
 - Mikron company, Russia
 - Malaysian Institute of Microelectronic Systems, Malaysia
 - Institute of Experimental and Applied Physics, Czech Republic
 - University of West Bohemia, Faculty of Electrical Engineering, Czech Republic
-

SOME PUBLICATIONS

Google Scholar: <https://scholar.google.com/citations?hl=ru&user=518P4YEAAAJ>

1. "Scintillation light detection with MAPD-3NK and MPPC-S12572-010P readout", R. Akbarov, S. Nuriyev and etc., <https://doi.org/10.18502/ken.v3i1.1767>
2. "Fast neutron detectors with silicon photomultiplier readouts", Akbarov R., Ahmadov G. and etc., <https://doi.org/10.1016/j.nima.2018.11.089>
3. "Scintillation readout with MAPD array for gamma spectrometer", R. Akbarov, S. Nuruyev, G. Ahmadov and etc., <https://doi.org/10.1088/1748-0221/15/01/C01001>

4. "A new physical model of Geiger-mode avalanche photodiodes", F. Ahmadov, G. Ahmadov, R. Akbarov and etc., <https://doi.org/10.1088/1748-0221/15/01/C01009>
5. "Gamma-ray spectroscopy with MAPD array in the readout of LaBr₃:Ce scintillator", G. Ahmadov, F. Ahmadov, R. Akbarov and etc., <https://doi.org/10.1088/1748-0221/16/07/P07020>
6. "Compact and sustainable electronic module for silicon photodetectors", A Sadigov, S Nuruyev, R Akbarov and etc., <https://doi.org/10.32523/ejpfm.2023070302>
7. "Investigation of parameters of new MAPD-3NM silicon photomultipliers", F. Ahmadov, G. Ahmadov, R. Akbarov and etc., <https://doi.org/10.1088/1748-0221/17/01/C01001>