

Curriculum Vitae

Ms. Sayara Aga-Tagiyeva



Research and Educational Center
“Smart Materials and Biomedical Applications”,
Science and Technology Park “Fabrika”,
Immanuel Kant Baltic Federal University.

Address: Gaidara 6, 23600 Kaliningrad, Russia

ORCID: [0009-0006-6605-7423](https://orcid.org/0009-0006-6605-7423)

Phone: +79684966609

Email: agatagiyewas@gmail.com

Date of Birth: 12 November 2002

Place of Birth: Mary, Turkmenistan

Education

Sep.2020 – present IKBFU, Institute of Medicine and Life Sciences, Chemistry, *Bachelor*, supervisor
A.S.Omelyanchik

Honors

Oct. 2023 Winner of the competition in the XXVI International Environmental Student Conference (MEK-2023) on the topic "Sorption of Cr(VI) using Fe₃O₄ magnetite nanoparticles: Adsorption isotherms, kinetic and thermodynamic studies"(Novosibirsk, Russia);

Aug. 2023 Best poster presentation award on Smart Composites International School 2023 on “Exploring the Photocatalytic and Magnetic Properties of Zinc-Doped Cobalt Ferrite Nanocomposites with PEG and PVDF”(Kaliningrad, Russia);

Apr. 2023 Winner of the competition in the All-Russian Forum of Young Researchers "ChemBioSeason" 2023" on the thesis "Production of PVDF-based composites with inclusion Pegylated cobalt ferrite nanoparticles doped with zinc: structural and magnetic properties" (Kaliningrad, Russia);

Grants

Sep. 2022 –Dec. 2023 *Laboratory assistant*
RSF 22-22-20124 Synthesis and investigation of nickel-zinc nanoparticles doped with silver, as promising multifunctional active agents for wastewater treatment

Research interests

- 1) Synthesis and magnetic properties investigation of nanoparticles;
- 2) Application of nanoparticles in biomedicine (hyperthermia, drug delivery, antibacterial properties);
- 3) Synthesis of quantum dots;
- 4) Synthesis of nanoparticles with functional groups for sorption of dyes and heavy metals

Conferences and Schools

Apr, 2023 ChemBio All-Russian Forum of Young Researchers "ChemBioSeason" 2023" (Kaliningrad, Russia) *Oral presentation*: "Production of PVDF-based composites with inclusion Pegylated cobalt ferrite nanoparticles doped with

zinc: structural and magnetic properties"

- Aug. 13-17, 2023 SCIS Smart Composites International School 2023 (Kaliningrad, Russia) *Poster presentation*: "Exploring the Photocatalytic and Magnetic Properties of Zinc-Doped Cobalt Ferrite Nanocomposites with PEG and PVDF"
- Aug. 13-17, 2023 SCIS Smart Composites International School 2023 (Kaliningrad, Russia) *Oral presentation*: "PEGylated magnetic nanoparticles for water purification from methylene blue"
- Apr. 13-15, 2023 XXXIII All-Russian Mendeleev Competition for Chemistry Students (Moscow, Russia)
Poster presentation: "Synthesis, structural and magnetic properties Pegylated magnetic iron oxide nanoparticles"
- Jul, 2023 ASAM The 8th Asian Symposium on Advanced Materials (ASAM-8) (Novosibirsk, Russia) *Poster presentation*: "PEGylated Magnetic Nanoparticles for Water Purification from Organic Dyes"
- Oct. 23-24, 2023 MEK XXVI International Environmental Student Conference (MEK-2023) (Novosibirsk, Russia) *Oral presentation*: "Sorption of Cr(VI) using Fe₃O₄ magnetite nanoparticles: Adsorption isotherms, kinetic and thermodynamic studies
- Nov 20-Dec 20, 2023 SCAMT Internship at ITMO's SCAMT, Synthesis of quantum dots and mesoporous structures (Saint-Petersburg, Russia)

Publications

- 2022, Q2 Effect of PEG nanoparticle surface coating on the magnetic and structural properties of CoFe₂O₄/PVDF composites; V.D. Salnikov, S.E. Aga-Tagieva, V.G. Kolesnikova, A.O. Tovpinets, A.S. Omelyanchik, V.V. Rodionova; *Journal of Magnetism and Magnetic Materials*; DOI:10.1016/j.jmmm.2023.171498
- 2023, Q4 Pegylated iron oxide nanoparticles: structural, magnetic and sorption properties; S.E. Aga-Tagieva, A.O. Tovpinets, A.S. Omelyanchik, K.E. Magomedov, V.V. Rodionova; DOI: 10.56304/S1992722323060031