

Aydan Bagirova

📍 Baku, Azerbaijan ✉ aydanbaghir12@gmail.com ☎ +994773632737 📱 in/aydan-bagirova-464ba6237

SUMMARY

Master's student in Chemistry at Baku Higher Oil School with a strong academic background in chemical sciences. Interested in petrochemical and analytical chemistry, eager to gain advanced research and laboratory experience, and motivated to contribute to innovation in the oil and gas industry.

EDUCATION

Baku Higher Oil School (BHOS)
Master's in Oil and Gas Technology
2025 – (expected 2027)
Medium of Instruction: English

Baku State University (BSU)
Bachelor's in Chemistry
2021 – 2025
GPA: 87.97
Medium of Instruction: English

EXPERIENCE

Laboratory Intern

Azersun Holding- “GələcəkSƏN” Summer Internship Program (Food Quality Control) July 2025 -September 2025, Baku

- Acquired hands-on experience in laboratory procedures, including sample handling, chemical testing, and quality assessment.
- Operated key laboratory instruments such as HPLC and GC systems, UV-Vis, IR, centrifuges, turbidity meters, and refractometers.
- Gained insight into professional lab operations and enhanced collaboration skills within a team environment.
- Learned to document and analyze experimental data accurately while maintaining strict adherence to safety and quality guidelines.

Research laboratory intern

Institute of Geology and Geophysics April 2025 -June 2025, Baku

- Gained experience in laboratory methods for analyzing soil, rock, and water samples related to geological studies.
- Assisted in interpreting geophysical survey data and understanding subsurface material properties.
- Enhanced skills in data collection, sample preparation, and instrumental analysis relevant to geological and environmental research.

Research laboratory intern

Water and Amelioration Scientific Research Institute February 2025 - April 2025, Baku

- Assisted in hydro-technical research and data analysis.
- Participated in field assessments and contributed to reports on irrigation systems and water resource optimization.
- Learned and performed water and soil analysis techniques to assess quality and composition.
- Collaborated with industry professionals to enhance understanding of sustainable water management practices.

Research Experience

Baku State University (BSU) November 2024 - April 2025, Baku, Azerbaijan

- Conducted experimental research on the synthesis of polyurethane-based nanocomposites for artificial heart valve applications, focusing on biocompatibility and durability.
- Investigated key material properties such as mechanical strength, biostability, and compatibility with cardiovascular tissue to ensure the viability of the nanocomposites in biomedical applications.
- Analyzed and documented results, contributing to advancements in the development of biomedical materials for cardiovascular implants.

Laboratory researcher

Institute of Chemistry of Additives named after Academician A.M.Guliyev November 2023 - May 2024, Baku

- Gained practical experience at the Institute of Additives Chemistry named after Academician Ali Quliyev.
- Participated in the synthesis and investigation of complex organic compounds.
- Selected appropriate solvents for synthesized compounds to ensure optimal dissolution.
- Prepared and dried around 70 samples; performed microscopic screening, of which only the most structurally suitable (~20%) were selected for further spectroscopic analysis (e.g., FTIR, NMR).

Volunteer

ASAN Volunteer July 2022 - October 2022, Baku

- Assisted in the reception of citizens, providing guidance and answering questions related to document processing.
- Facilitated communication between citizens and notary staff, helping to resolve any issues or questions that arose during the document submission process.

Volunteer

Boccia Federation November 2021 - December 2021, Baku

- Coordinated and led pre-game training sessions for physically disabled players, boosting their skills and confidence.
- Organized and managed game logistics, ensuring the availability of equipment and creating a supportive atmosphere for players and spectators.
- Oversaw the event's execution, enforcing safety protocols and addressing issues promptly to ensure a seamless experience for all participants.

SKILLS

TECHNICAL SKILLS

Safety & Compliance: Chemical safety, hazardous materials handling

Laboratory & Analytical Techniques: Sample preparation, titration, HPLC, GC, UV-Vis, IR, centrifuges, pH meters, spectrometers, turbidity meters, refractometers

Chemical and Data Analysis: Qualitative and quantitative analysis, experimental data interpretation

Software: Microsoft Excel, Word, PowerPoint, Statistical tools, Excel for data analysis

SOFT SKILLS

Soft Skills: Teamwork, attention to detail, problem-solving

LANGUAGES

- English – Intermediate
- Azerbaijani – Native
- Turkish – Native

REFERENCES

Ilkin Medinov - Head Inspector, Azersun Holding
Phone: +994 55 961 61 55