

Tahir Javadzade

Researcher on Analytical and Crystal chemistry

E-mail: tjavadzade@khazar.org

Education

2020 – 2025

PhD

Analytical chemistry

Dissertation topic: Synthesis, analytical and biological study of transition metal complexes of some nitrogen and sulphur-containing heterocyclic compounds

Baku State University, Azerbaijan

2017 – 2019

M.Sc.

Crystallography and Crystal chemistry

Baku State University, Azerbaijan

2013 – 2017

B.Sc.

Azerbaijan State Oil and Industry University, Azerbaijan

ADDITIONAL EDUCATION & CERTIFICATES

01/09/2024 - 01/10/2024

Researcher

University of Lisbon

05/03/2023- 01/06/2023

Researcher

Sapienza University of Roma, Italy

19/02/2018 - 20/04/2018

Internship/ SOCAR

18/07/2018 - 20/09/2018

Internship/SOCAR

July 2016 (5 days)

Industrial experience

Azerbaijan International Mining of Company (AIMC)

August 2015

Summer School/SOCAR

Employment

2018 – 2023

Engineer

Department of Geophysics and Geology, SOCAR, Azerbaijan

Teaching

Undergraduate

General chemistry
Analytical chemistry
Physical chemistry

Graduate

Separation and concentration methods
X-ray spectral analysis methods
Application of complex compounds in analytical chemistry
Optical analysis methods
Electrochemical analysis methods AAS method
Research methods

LANGUAGE SKILLS

English

Upper Intermediate

French

Intermediate

Publications

T.Javadzade, S.Hajiyeva, F.Chyragov, A.Nunes, J.Lasri, S.Hamidov, K.Hasanov, K.Mahmudov. Cycloaddition of CO₂ with epoxides into cyclic carbonates catalyzed by cobalt (II or II/III)-arylhydrazonates. *Journal of Organometallic Chemistry*. 2025.

E.Shelukho, V.Zaytsev, V.Khrustalev, T.Hökelek, K.Hasanov, N.Guliyeva, **T.Javadzade**, M.Al-Douh. Synthesis, crystal structure and Hirshfeld surface analysis of 7-oxo-6-phenyl-6, 7-dihydro-5H-thieno [2, 3-f] isoindole-8-carboxylic acid. *Acta Cryst.* 2025

I.Kolesnik, A.Sanchez-Pimentel, M.Grigoriev, T.Hökelek, K.Hasanov, N.Guliyeva, **T.Javadzade**, M.Al-Douh. Synthesis, crystal structure and Hirshfeld surface analysis of ethyl (E)-2-cyano-3-[5-(4-ethylphenyl) isoxazol-3-yl] prop-2-enoate. *Acta Cryst.* 2025

E.Yakovleva, V.Salakhova, V.Khrustalev, R.Nazarova, K.Hasanov, **T.Javadzade**, M.Akkurt, G.Manahelohe. Crystal structure and Hirshfeld surface analysis of (3aRS,4RS,10SR,10aSR)-2-(3,5-dimethylphenyl)-4-hydroxy-10-methyl-1-oxo-2,3,3a,4,10,10a-hexahydro-1H-[1]benzofuro[2,3-f]isoindole-10-carboxylic acid dimethylformamide monosolvate. *Acta Cryst.* 2025

A.Gurbanov, T.Hökelek, G.Mammadova, K.Hasanov, **T.Javadzade**, A.Belay. Crystal structure and Hirshfeld surface analysis of a supramolecular aggregate of 4-formyl-N, N-dimethylanilinium bromide with tetrabromomethane. *Acta Cryst.* 2025.

A.Gurbanov, T.Hökelek, G.Mammadova, K.Hasanov, **T.Javadzade**, A.Belayh. Crystal structure, Hirshfeld surface analysis and crystal voids of 4-nitro-benzo[c][1,2,5]selenadiazole. *Acta. Cryst.* V 81. 2025.

A.Gurbanov, T.Hökelek, G.Mammadova, K.Hasanov, **T.Javadzade**, A.Belayi. Crystal structure and Hirshfeld surface analysis of supra-molecular aggregate of 2,2,6,6-tetra-methyl-piperidin-1-ium bromide with 1,2,3,4-tetra-fluoro-5,6-di-iodo-benzene. *Acta Cryst.* 2025.

A.Gurbanov,F.Guseinov, A.Samigullina, T.Hokelek,K.Hasanov,**T.Javadzade**, A.Belay. Synthesis and crystal structure analysis of 1-ethyl- 1,3-dihydro-2H-benzo[d]imidazole-2-thione. Acta Cryst. 2025. E81, 169–171.

A.Gurbanov,F.Guseinov, A.Samigullina, T.Hokelek,K.Hasanov,**T.Javadzade**, A.Belay. Syntheses, crystal structures, Hirshfeld surface analyses and crystal voids of 1-(4-bromophenyl)- 2,2-dichloroethan-1-one and 2,2-dibromo-1-(p- tolyl)ethan-1-one. Acta Cryst. 2025. E81, 120–126.

A. Gurbanov, T.Hokelek, G.Mammadova,K.Hasanov,**T.Javadzade**, A.Belay. Crystal structure, Hirshfeld surface analysis and crystal voids of 4-nitrobenzo[c][1,2,5]selenadiazole. Acta Cryst.2025. E81, 99–103.

T.Javadzade .E.Eyyubova. Adsorption studies of Ni (II) ion removal from aqueous solutions by novel modified synthetic copolymer: adsorption isotherms. Journal of young researcher, 2024, №3, 27-40

A.Pronina, A.Kutasevich, M.Grigoriev, K.Hasanov, N.Sadikhova, **T.Javadzade**, M.Akkurt, A.Bhattarai. Crystal structure and Hirshfeld surface analysis of 1-[6-bromo-2-(3-bromophenyl)-1, 2, 3, 4-tetrahydroquinolin-4-yl] pyrrolidin-2-one. Structure Reports. 2024.V.80. 967-972.

T.Javadzade, I.Rzayeva, S.Demukhamedova, G.Akverdieva, V.Farzaliyev, A.Sujayev, F.Chiragov. Synthesis, structural analysis, DFT study, antioxidant activity of metal complexes of N-substituted thiourea. Polyhedron 231 (2023) 116274. doi.org/10.1016/j.poly.2022.116274

P.R.Mammadov,**T.A.Javadzade**, A.R.Sucayev,R.E.Mammadova, F.M. Chiragov. New simple method for the determination of trace level copper (II) using 1- [2- (allylamino) -1-methylethyl] thiourea in presence of hydrofob amines by molecular absorption spectral method in the UV and visible region. AJCN, Vol . 4, No 2, 2022, pp. 40-50

P.R.Mammadov, **T.A.Javadzade**, A.R.Sucajev, F.M.Chiragov .New simple spectrophotometric methods for the determination of trace level silver(i) using 1- [2-(allylamino) -1-methylethyl] thiocarbamide. Baki Universitetinin Xəbərləri. № 1. Təbiət elmləri seriyası. 2021. p 5-13.

T.Javadzade, V.I.Mardanova, A.R.Sujayev, F.M.Chiragov. Determination of Trace Nickel(II) after the Preliminary Extraction of Complexes with 1-(2-Allylamino-1-Methylethyl) Thiocarbamide. Journal of Analytical Chemistry.2023. №8, c. 1070-1078.

T.Javadzade. Development of new natural sorbent for the removal of copper from industrial wastewater. Su problemləri: elm və texnologiyalar.2023.

T.Javadzade, S.Demukhamedova, G.Akverdieva, A.Sujayev, F.Chiragov. Structural analysis of the thiourea derivatives. International Conference:Modern Problems of Theoretical & Experimental Chemistry.2022.

T.Javadzade, P.Mammadov,A.Sujayev,F.Khalilova. New simple spectrophotometric method for the determination of trace level copper (II) using 1-[2- (allylamino)-1-methylethyl] thiourea in presence of hydrofob amines.. International Conference:Modern Problems of Theoretical & Experimental Chemistry.2022.

T.Javadzade, F.Chiragov,I.Rzayeva,A.Sucayev. Combined action of metal complexes of cyclic thiocarbamides as antioxidant additives.. Akademik Əli Musa oğlu Quliyevin 110 illik yubileyinə həsr olunmuş “Müxtəlif təyinatlı üzvi maddələr və kompozision materiallar” mövzusunda Respublika Elmi Konfransının materialları.2022.

T.Javadzade, P.Mammadov,A.Sucayev,F.Chiragov.The spectrophotometric study of copper (II) with 1-[2- (allylamino)-1-methylethyl] thiocarbamide in presence of hydrofob

amines.2022.

T.Cavadzade, P.Mammadov, F.Chiragov.Simple spectrophotometric method for the determination of trace level copper (II) in oil water samples. Ekologiya və torpaqşünaslıq elmləri XXI əsrdə.. 2022.

T.A. Джавадзаде, Ф.М.Чырагов, А.Р.Суджаев. Изучение комплексообразования Ni(II) с 1-[2-(аллиламино)-1- метилэтил] тиокарбамидом. Спектроскопия координационных соединений.2022. , №1, с. 15-19.

T.A. Джавадзаде, Ф.М.Чырагов, А.Р.Суджаев.Изучение комплексообразования Ag(I) с 1-[2-(аллиламино)-1-метилэтил] тиомочевинной

T.Javadzade, F.Chiragov. Langmuir isotherm study of Ni (II) ion removal from aqueous solutions by novel modified synthetic copolymer. Kimya və kimya texnologiyası III Respublika elmi konfransı.2024

Talk

Structural analysis of the thiourea derivatives.International Conference:Modern Problems of Theoretical & Experimental Chemistry.2022.

Development of new natural sorbent for the removal of copper from industrial wastewater. Environmental remediation in Azerbaijan.BHOS.2023.

Certificate of the authorship of an invention

R.Məmmədov, **T.Ə.Cavadzadə**, Ə.R.Sucayev, F.M.Çıraqov.Gümüşün fotometrik təyini üsulu