



Árpád-Ferenc Szőke

Date of birth: 02/03/1991 | **Nationality:** Romanian, Hungarian | **Gender:** Male |

Email address: arpad.szoke@ubbcluj.ro |

Address: str. Arany János nr. 11, 400028, Cluj-Napoca, Romania (Work)

● WORK EXPERIENCE

27/02/2023 – CURRENT Cluj-Napoca, Romania

ASSISTANT PROFESSOR BABEȘ-BOLYAI UNIVERSITY, FACULTY OF CHEMISTRY AND CHEMICAL ENGINEERING

Conducting labworks and/or courses for 2nd, 3rd and 4th year student in the following subjects:

1. Corrosion and anticorrosive protection
2. Fluid mechanics and impulse transfer
3. Heat transfer
4. Transport equations
5. Matter transfer

01/10/2016 – CURRENT Cluj-Napoca, Romania

"CADRU DIDACTIC ASOCIAT" BABEȘ-BOLYAI UNIVERSITY, FACULTY OF CHEMISTRY AND CHEMICAL ENGINEERING

Conducting labworks for 2nd, 3rd and 4th year student in the following subjects:

1. Electrochemistry
2. Thermodynamics
3. Kinetics
4. The chemistry of colloids and surfaces
5. The chemistry of macromolecules
6. Surface protection
7. Corrosion and anticorrosive protection
8. Fluid mechanics and impulse transfer
9. Heat transfer

24/02/2020 – 26/02/2023 Cluj-Napoca, Romania

ASSISTANT LECTURER BABEȘ-BOLYAI UNIVERSITY, FACULTY OF CHEMISTRY AND CHEMICAL ENGINEERING

Conducting labworks for 1st, 2nd, 3rd and 4th year student in the following subjects:

1. Electrochemistry
2. Thermodynamics
3. Kinetics
4. The chemistry of colloids and surfaces
5. The chemistry of macromolecules
6. Surface protection
7. The basics of chemical reaction engineering

EDUCATION AND TRAINING

01/09/2016 – 21/10/2019 Cluj-Napoca, Romania

PHD, ELECTROCHEMISTRY Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering

Address str. Arany János nr. 11, Cluj-Napoca, Romania | **Website** <http://chem.ubbcluj.ro>

01/10/2014 – 30/09/2016 Cluj-Napoca, Romania

MASTERS DEGREE, MODERN TECHNIQUES IN CHEMICAL SYNTHESIS Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering

Address str. Arany János nr. 11, Cluj-Napoca, Romania | **Website** <http://chem.ubbcluj.ro/>

01/10/2010 – 30/09/2014 Cluj-Napoca, Romania

BACHELORS DEGREE, THE CHEMISTRY AND TECHNOLOGY OF ORGANIC COMPOUNDS, PETROCHEMISTRY, CARBOCHEMISTRY Babeş-Bolyai University, Faculty of Chemistry and Chemical Engineering

Address str. Arany János nr. 11, Cluj-Napoca, Romania | **Website** <http://chem.ubbcluj.ro/>

01/05/2021 – 01/05/2022 Cluj-Napoca, Romania

ENTREPRENEURSHIP CERTIFICATION Babeş-Bolyai University

Address Str. Mihail Kogălniceanu, nr. 1, Cluj-Napoca, Romania | **Website** <https://www.ubbcluj.ro/ro/>

01/12/2018 – 15/12/2018 Bucharest, Romania

PROJECT MANAGER CERTIFICATION SC Soft Skills Training SRL

Address Calea Plevnei numărul 61, Bucharest, Romania | **Website** <https://www.cursuricertificate.ro/>

01/10/2010 – 30/09/2014 Cluj-Napoca, Romania

PEDAGOGIC MODULE I. Babeş-Bolyai University

Address Str. Mihail Kogălniceanu, nr. 1, Cluj-Napoca, Romania | **Website** <https://www.ubbcluj.ro/>

01/10/2014 – 30/09/2016 Cluj-Napoca, Romania

PEDAGOGIC MODULE II. Babeş-Bolyai University

Address Str. Mihail Kogălniceanu, nr. 1, Cluj-Napoca, Romania | **Website** <https://www.ubbcluj.ro/>

LANGUAGE SKILLS

Mother tongue(s): **HUNGARIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ROMANIAN	C2	C2	C2	C2	C2
ENGLISH	C2	C2	C2	C2	C2
FRENCH	A2	B1	A2	A2	A2
SPANISH	A2	A2	A1	A1	A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Microsoft Office | Social Media | Microsoft Teams | Adobe Photoshop | OriginLab | Video editing

● ADDITIONAL INFORMATION

CONFERENCES AND SEMINARS

01/10/2010 – 31/12/2023

Selection of Conferences attended with oral presentations

Szőke, Á.F.; Szabó, G., The incubation of indigo carmine in sol-gel coatings, XXXII. National Student Conference (OTDK), April **2015**, Veszprém, Hungary

Szőke, Á.F.; Turdean, G., Graphene based modified electrodes for dopamine detection prepared with different immobilization techniques, XIII. Students for students international conference, April **2016**, Cluj-Napoca, România

Szőke, Á.F.; Sanders, Q.J.; Szabó, G.S.; Muresan, L.M.; Turdean, G.L., Electrochemical sensors based on reduced graphene oxide immobilized with chitosan, 22nd International Conference on Chemistry, November **2016**, Timisoara, România

Szőke, Á.F. ; Turdean, G.L., Modified electrodes for dopamine determination, 33rd National Student Conference (OTDK), March **2017**, Miskolc, Hungary

Szőke, Á.F.; Szabó, G.S.; Albert, E.; Hórvölgyi, Z.; Muresan, L.M., Colloidal coatings with improved corrosion inhibition properties, 6th RSE-SEE international conference, June **2017**, Balatonkenese, Hungary

Szőke, Á.F.; Szabó, G.S.; Muresan, L.M.; Albert, E.; Hórvölgyi, Z., The corrosion inhibiting effect of chitosan coatings impregnated with indigo carmine on zinc substrates, 22nd International Conference on Chemistry, October **2017**, Deva, România

Szőke, Á.F.; Szabó, G.S.; Albert, E.; Muresan, L.M.; Hórvölgyi, Z., Cross-linking chitosan for improved anticorrosive protection of zinc, 11th Conference on Colloid Chemistry – 11CCC, Mai **2018**, Eger, Hungary

Szőke, Á.F.; Zsebe, Z.; Turdean, G.L.; Muresan, L.M., Selective detection of ascorbic acid and dopamine at AuNPs - electrochemically reduced graphene oxide modified glassy carbon electrode, 69th Annual Conference of the International Society of Electrochemistry, September **2018**, Bologna, Italy

Szőke, Á.F.; Szabó, G.S.; Muresan, L.M.; Albert, E.; Hórvölgyi, Z., Characterizing the permeability of chitosan coatings on zinc by wetting and impedance spectroscopy studies, 24th International Conference on Chemistry, October **2018**, Sovata, România

Szőke, Á.F.; Szabó, G.S.; Hórvölgyi, Z.; Albert, E.; Muresan, L.M., Improving the anticorrosive properties of chitosan coatings by impregnation, 7th RSE-SEE international, Mai **2019**, Split, Croatia

Szőke, Á.F.; Szabó, G.S.; Hórvölgyi, Z.; Albert, E.; Végh, A.G.; Zimányi, L.; Filiatre, C.; Muresan L.M., Tailoring the permeability of chitosan-based coatings deposited on zinc substrates with different methods, 71th Annual Conference of the International Society of Electrochemistry, September **2020**, Belgrade, Serbia

01/01/2010 – 27/02/2023

Selection of conferences attended with poster presentations

Zsebe, Z.; **Szőke, Á.F.;** Muresan, L.M.; Turdean, G.L., Hybrid material based on gold nanoparticles and graphene for detection of ascorbic acid, 23rd International Conference on Chemistry, October **2017**, Deva, România

Szőke, Á.F.; Muresan, L.M.; Turdean, G.L.; Zsebe, Z.; Ablaeva, K., Glassy carbon electrode modified with graphene oxide and gold nanoparticles for ascorbic acid detection, 23 International Symposium on Analytical and Environmental Problems, October 2017, Szeged, Hungary

Buier, R.H., Szabó, G.S., **Szőke, Á.F.**, Fülöp, A.P., Muntean, N., Katona, G., Mureşan, L.M., Influence of methylene blue impregnated silica nanocontainers on the properties of chitosan thin layers, 26th International Conference on Chemistry, September **2020**

Gyeresi, I.K.; **Szőke, Á.F.;** Albert, E.; Márton, P.; Szabo, G.; Horvolgyi, Z.; Physicochemical characterization of chitosan nanocoatings modified with different crosslinking agents, 28th International Conference on Chemistry, October **2022**, Oradea, Romania

Szőke, Á.F.; Csiki, E.; Szabo, G.; Muntean, N.; Determination of the antioxidant activity of different types of coffee by means of Briggs-Rauscher analytical method, 28th International Conference on Chemistry, October **2022**, Oradea, Romania

HONOURS AND AWARDS

2020

Young Researcher Awards – Regional Committee in Cluj of the Hungarian Academy of Sciences

ORGANISATIONAL SKILLS

Main organizer of the Alumni program of the Hungarian Line of the Faculty of Chemistry and Chemical Engineering

RESEARCH THEMES

01/10/2010 – CURRENT

Main Research Themes

My research consists of the development and physico-chemical characterization of thin layer used in modified electrodes and anticorrosive protection.

Materials used during my research: chitosan, porous silica, Nafion, materials with electrocatalytic activity, corrosion inhibitors

Methods: dip-coating, drop casting, electrophoretic deposition, voltammetric methods, potentiodynamic polarization, electrochemical impedance spectroscopy, UV-Vis spectroscopy, microscopy methods, methods to determine wettability (sessile drop method, captive bubble method)