



**Europass
Curriculum Vitae**

Personal information

First name(s) / Surname(s) **Simona Camelia Varvara**
Address(es) 6, Vârtop St., 510002, Alba Iulia, Romania
Telephone(s) +40 258806130/182
E-mail svarvara@uab.ro
Nationality Romanian

Work experience

Dates October 2014 - present

Occupation or position held Associate Professor
Department of Cadastre, Civil Engineering and Environmental Engineering

Main activities and responsibilities **Teaching activities**
Courses: *Chemistry, Analytical Chemistry, Electrochemistry and corrosion, Wastewaters treatment, Integrated Environmental Monitoring*
Scientific research in chemistry (electrochemistry) and environmental protection
Coordination of research projects; participation in national and international research teams.
Dissemination of results through publication of scientific articles and participation in national and international conferences;
Organization of events (conferences, workshops, round tables).

Name and address of employer "1 Decembrie 1918" University, 5 Gabriel Bethlen St., 510009, Alba Iulia, Alba County, Department of Cadastre, Civil Engineering and Environmental Engineering
E-mail: cond@uab.ro, Web: www.uab.ro, Phone: +40(0)258-806130

Type of business or sector Higher Education, Research

Dates 2008-2013

Occupation or position held Senior researcher (Level 4 from 5)

Main activities and responsibilities **Scientific research in chemistry (electrochemistry) and archaeometry**
Coordination of research projects; participation in national and international research teams.
Dissemination of research results through publication of scientific articles and participation in national and international conferences;
Organization of events (conferences, workshops, round tables).

Name and address of employer "1 Decembrie 1918" University, Systemic Archaeology Institute (UAB), Mihai Viteazul 12, 510010, Alba Iulia, Alba County, Tel: +40 258 817071, Fax: +40 258 818459,
E-mail: arhsis@uab.ro, Web: www.bcum.uab.ro

Type of business or sector Research – Archaeometry Laboratory

Dates 2005 –2008

Occupation or position held Scientific Researcher (Level 3 from 5)

Main activities and responsibilities **Scientific research in chemistry (electrochemistry) and archaeometry**
Coordination of research projects;
Participation in national and international research teams.
Publication of scientific articles and participation in national and international conferences;
Organization of events (conferences, workshops, round tables).

Name and address of employer	"1 Decembrie 1918" University, Multi-User Research Centre, Mihai Viteazul 12, 510010, Alba Iulia, Alba County, Tel: +40(0)258-817071, Fax: +40(0)258-818459, E-mail: cond@uab.ro , Web: www.bcum.uab.ro
Type of business or sector	Research – Archaeometry Laboratory
Dates	2002 - 2005
Occupation or position held	Scientific Researcher (Level 2 from 5) Research assistant (level 1 from 5)
Main activities and responsibilities	Scientific research in chemistry (electrochemistry) and archaeometry Participation in national and international research teams. Publication of scientific articles. Participation in national and international conferences.
Name and address of employer	"1 Decembrie 1918" University, Multi-User Research Centre, Mihai Viteazul 12, 510010, Alba Iulia, Alba County, Tel: +40(0)258-817071, Fax: +40(0)258-818459, E-mail: cond@uab.ro , Web: www.bcum.uab.ro
Type of business or sector	Research – Archaeometry Laboratory
Dates	November 1998 – July 2002
Occupation or position held	PhD student/ Teaching assistant
Main activities and responsibilities	Scientific research in electrochemistry Participation in national and international research teams. Publication of scientific articles. Teaching activities (seminars and laboratory work) for "Electrochemistry and Corrosion", "Electrohydrometallurgy", " Electrochemical methods of investigation of electrode processes", "Chemical thermodynamics", "Chemistry of macromolecules"
Name and address of employer	"Babes-Bolyai" University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca, Romania,web: chem.ubbcluj.ro
Type of business or sector	Research – Physico-chemical Department
Dates	September 1997 – October 1998
Main activities and responsibilities	Natural sciences teaching activities for pupils in classes IX-XII
Name and address of employer	Grupul Școlar "Dorin Pavel", 39 Tudor Vladimirescu St., Alba Iulia, Romania
Type of business or sector	High School
Education and training	
Dates	May 2003
Title of qualification awarded	PhD in Chemistry
Principal subjects/occupational skills covered	Electrochemistry
Name and type of organisation providing education and training	Babes-Bolyai" University, Cluj-Napoca, Romania PhD thesis: "Morphological and kinetic aspects of copper electrodeposition from acid sulphate solutions in the presence of organic additives" (Supervisor: Prof. dr. Ionel Catalin Popescu)
Dates	October 1996 – July 1997
Title of qualification awarded	M. Sc. programme in Applied Electrochemistry, University "Babes Bolyai", Cluj-Napoca, Romania
Principal subjects/occupational skills covered	Electrochemistry, Investigation methods
Name and type of organisation providing education and training	"Babes-Bolyai" University, Faculty of Chemistry and Chemical Engineering, 11 Arany Janos St, Cluj-Napoca, Romania
Principal subjects/occupational skills covered	Dissertation: "Influence of the organic additives on the copper electrodeposition from sulphate solutions"
Name and type of organisation providing education and training	"Babes-Bolyai" University, Faculty of Chemistry and Chemical Engineering, 11 Arany Janos St, Cluj-Napoca, Romania
Dates	September 1985 – June 1989
Title of qualification awarded	Highs School Graduate – specialty Chemistry
Principal subjects/occupational skills covered	<i>Romanian Language and Literature, Algebra, Geometry, Chemistry, Biology, History, Geography, English, French</i>

Name and type of organisation providing education and training "Horea, Cloșea și Crisân" High School, 11, "1 Decembrie 1918" St., Alba Iulia, Romania

Personal skills and competences

Mother tongue(s) Romanian

Other language(s) **English**

Self-assessment

European level (*)

Understanding		Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production	
B2	good	B2	good	B2	good	B2	good

English

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences

Teamwork
Good capacity for integration in multicultural environments

Organisational skills and competences

Experience in organizing and leading scientific research projects, conferences and learning activities

Computer skills and competences

PC usage (Microsoft Office, HTML), Origin, ZSimpWin

Driving licence

Category B

Associate Prof. Simona Camelia VARVARA, PhD

Alba Iulia, February 16th, 2021

A. Publications

1. Books published by Publishing Houses in Romania

1. **Simona Camelia Varvara** și Liana Maria Mureșan, "Metode electrochimice de investigare a electrodepunerii metalelor. Studii electrodepunerii cuprului", Casa Cărții de Știință Publisher, Cluj-Napoca, 2008, 151 pp. (ISBN 978-973-133-290-1) (CNCS B)

2. Chapters in scientific books published by publishing houses outside Romania

1. L. M. Muresan, **S. C. Varvara**, "Leveling and brightening mechanisms in metal electrodeposition" in "Metal Electrodeposition", Nova Science Publishers, USA (editor: Nunez Magdalena), (2005) ISBN 1-59454-456-5.

3. Studies and articles in scientific journals (selective)

Simona Varvara, S. A. Dorneanu , A. Okos , R. Bostan , M. Popa, G. Damian, P. Ilea, Dissolution of nickel in bromide based solutions used as lixiviants for waste printed circuit boards, Journal of Environmental Protection and Ecology, 21 (2), 2020, 551-560. (ISI)

Simona Varvara, S A Dorneanu A Okos L M Muresan R Bostan M Popa, D Marconi, P Ilea, Dissolution of Metals in Different Bromide Based Systems Electrochemical Measurements and Spectroscopic Investigations, Materials, 13, 2020, 3630, doi 103390/ma 13163630 (ISI)

Simona Varvara, R. Bostan M. Popa, F. Popa, Doxepin as corrosion inhibitor for copper in 3.5 wt. % NaCl solution, STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA, 65 (3), 215-226, 2020 (ISI)

Simona Varvara, R. Bostan, O. Bobis, L. Gaina, F. Popa, V. Mena, R. M. Souto, Multiscale electrochemical analysis of the corrosion control of bronze in simulated acid rain by horse-chestnut (*Aesculus hippocastanum* L.) extract as green inhibitor, Corrosion Science, Volume 165, 2020, 108381. (ISI)

D. Popa, R. Carpa, M. Moldovan, D. Prodan, M. Golumbeanu, **Simona Varvara**, M. Popa, Culturable bacterial communities from the spoiled walls of the heritage buildings, Journal of Environmental Protection and Ecology, 20 (2019) pp. 773-780. (ISI)

Simona Varvara, L. Găină, R. Bostan, F. Popa, A. Grozav, Some Phenothiazinyl-thiazolyl-hydrazine Derivatives as Corrosion Inhibitors for Carbon Steel in 1.0 M HCl: Electrochemical, SEM-EDX and DFT Investigations, International Journal of Electrochemical Science, 13 (2018), pp. 8338–8364. (ISI)

D. Popa, **Simona Varvara**, M. Moldovan, D. Prodan, R. Carpa, A. Varsta, M. Popa, Study on the importance of physicochemical characteristics from the walls in the rehabilitation works of heritage buildings, Journal of Environmental Protection and Ecology, 19(3), (2018) pp. 1166-1174. (ISI)

Simona Varvara, R. Bostan, O. Bobis, L. Gaina, F. Popa, V.Mena, R. M. Souto, Propolis as a green corrosion inhibitor for bronze in weakly acidic solution, Applied Surface Science 426 (2017) 1100–1112. (ISI)

R. Bostan, **Simona Varvara**, L. Gaina T. Petrisor Jr., L.M. Muresan, Protective effect of inhibitor-containing nitrocellulose lacquer on artificially patinated bronze, Progress in Organic Coatings 111 (2017) pp. 416–427. (ISI)

M. Popa, R. Bostan, **Simona Varvara** *, M. Moldovan, C. Rosu, Removal of Fe, Zn AND Mn ions from acidic mine drainage, using hydroxyapatite, Journal of Environmental Protection and Ecology 17(4) 2016, pp. 1472-1480, (ISI)

Rotaru, Ileana; **Simona Varvara**; Muresan, Liana Maria, Inhibition Effect Of Some Thiadiazole Derivatives On Bronze Corrosion, Studia Universitatis Babes-Bolyai Chemia 60(3) 2015, pp. 129-140 (ISI)

M. Popa, R. Bostan, N. Ilie, **Simona Varvara**, Natural sorbents used for the removal of heavy metals from acidic wastewaters generated at 'Valea Sesei' tailing pond from Rosia Poeni mining perimeter (Romania), Journal of Environmental Protection and Ecology 16, 3, 2015, 839-848 (ISI)

Rotaru, **Simona Varvara**; L. Gaina, L. Mureșan, Antibacterial drugs as corrosion inhibitors for bronze surfaces in acidic solutions, Applied Surface Science, 321, 2014, pp. 188-196 (ISI)

Simona Varvara, R. Bostan, L. Găină, L. M. Mureșan Thiadiazole derivatives as inhibitors for acidic media corrosion of artificially patinated bronze, Materials and Corrosion 65(12) (2014) : pp.1202-1214 (ISI)

M. Popa, D. Vintan, R. Bostan, **Varvara Simona**, Study on the possibilities of treating the wastewater from the porcelain industry, Journal of Environmental Protection and Ecology, 15(3) (2014) pp. 851-859 (ISI)

D. Popa, **Simona Varvara**, A. Botezan, M. Popa, Study of the effect of highways construction on the air quality, Journal of Environmental Protection and Ecology, 15 (1) (2014) pp. 7-15 (ISI)

I. Milosev, D. Blejan, **Simona Varvara**, L.M. Mureșan, Effect of anodic oxidation on the corrosion behavior of Ti-based materials in simulated physiological solution, Journal of Applied Electrochemistry, 43 (2013) pp. 645–658 (ISI)

Simona Varvara, M. Popa, R. Bostan, G. Damian, Preliminary considerations on the adsorption of heavy metals from acidic mine drainage using natural zeolite, Journal of Environmental Protection and Ecology, 14(4) (2013) pp.1506-1514. (ISI)

R. Bostana, **Simona Varvara**, M.Popa, L. M. Mureșan, Evaluation of phenothiazine as environmentally friendly corrosion inhibitor for bronze in synthetic acid rain, Studia Universitatis Babes-Bolyai, Chemia, LVIII, 3, (2013) pp. 71-80. (ISI)

R. Bostan, **S. Varvara**, L. Gaina, L. M. Muresan, Evaluation of some phenothiazine derivatives as corrosion inhibitors for bronze in weakly acidic solution, Corrosion Science 63 (2012) 275–286 (ISI)

I. Zamblau, **S. Varvara**, Muresan, , L. M. Muresan, Corrosion behavior of Cu-SiO₂ nanocomposite coatings obtained by electrodeposition in the presence of cetyl trimethyl ammonium bromide, Journal of Materials Science, 2011, 46 (20) 6484-6490 (ISI)

A. Vlasa, **S. Varvara**, A Pop, LM Muresan, Electrodeposited Zn-TiO₂ nanocomposite coatings and their corrosion behavior, Journal of Applied Electrochemistry, 2010, 40(8) 1519-1527 (ISI)

B. Fabbri, M. Gligor, S. Gualtieri, **S. Varvara** - *Archaeometric comparison between the Neolithic pottery of different cultures at the archaeological site of Alba Iulia (Transylvania, Romania)*, Studia Universitatis Babes-Bolyai, Geologia, 2009, 54(1), p. 23-26. (BDI-Ebsco)

S. Varvara, L. Muresan, K. Rahmouni, H. Takenouti, Evaluation of some non-toxic thiadiazole derivatives as bronze corrosion inhibitors in aqueous solution, Corrosion Science 50 (2008) pp. 2596–2604 (ISI)

- S. Varvara**, B. Fabbri, S. Gualtieri, P. Ricciardi, **M. Gligor** - *Archaeometric characterisation of the neolithic pottery discovered at Alba Iulia-Lumea Noua archaeological site (Romania)*, Studia Universitatis Babeş-Bolyai, Series Chimia, LIII(1), 2008, p. 5-13. (ISI)
- L. Muresan, **S. Varvara**, E. Stupnišek-Lisac, H. Otmačić, K. Marušić, S. Horvat Kurbegović, L. Robbiola, K. Rahmouni, H. Takenouti, Protection of bronze covered with patina by innocuous organic substances, *Electrochimica Acta*, 52(27), (2007) pp. 7770-7779. (ISI)
- L. Muresan, M. Gherman, I. Zamblau, Simona Varvara, C. Bulea, Corrosion behavior of electrochemically deposited Zn-TiO₂ nanocomposite coatings, *Studia Universitatis Babeş-Bolyai, Chemia*, LII, 3, (2007), pp. 97-104. (ISI)
- A. Vlasa, **S. Varvara**, L. Muresan, Electrochemical investigation of the influence of two thiadiazole derivatives on the patina of an archaeological bronze artefact using a carbon paste electrode, *Studia Universitatis Babeş-Bolyai, Chemia*, LII, (2007), pp.63-73. (ISI)
- I. Ignat, **S. Varvara**, L. Muresan, Study on the inhibiting behavior of a non-toxic corrosion inhibitor on bronze in aqueous electrolytes, *Studia Universitatis Babeş-Bolyai, Chemia*, L1, 1, (2006) pp. 127-134. (ISI)
- A. Goleanu, A. Marian, C. Florescu, M. Gligor, **S. Varvara** - *Chemical and structural features of the Neolithic ceramics from Vinca, Lumea Noua and Petresti cultures (Romania)*, *Revue Roumaine de Chimie*, 2005, 50(11-12), p. 939-949. (ISI)
- S. Varvara**, L. Muresan, I. C. Popescu, G. Maurin, Comparative study of copper electrodeposition from sulphate acidic electrolytes in the presence of IT-85 and of its components, *J. Appl. Electrochem.* (2005), 35 (1) pp. 69-76. (ISI)
- S. Varvara**, L. Muresan, I. C. Popescu, G. Maurin, Copper electrodeposition from sulfate electrolytes in the presence of hydroxyethylated 2-butyne-1, 4-diol, *Hydromet.* (2004), 75 (1-4), pp. 147-156. (ISI)
- S. Varvara**, L. Muresan, I. C. Popescu, Chronoamperometric study of copper electrocrystallization in the presence of organic additives, *Annal. West Univ.* (2003), 12, pp. 709-721. (ISI)
- S. Varvara**, L. Muresan, I. C. Popescu, Georges Maurin, Kinetics of copper electrodeposition in the presence of triethyl-benzyl ammonium chloride, *J. Appl. Electrochem.* (2003), 33 (8), pp. 685-692. (ISI)
- M. Cristea, **S. Varvara**, L. Muresan, I. C. Popescu, Neural networks approach for simulation of electrochemical impedance diagrams, *Ind. J. Chem.* (2003), 42A, pp. 764-768. (ISI)
- S. Varvara**, L. Muresan, A. Nicoara, G. Maurin, I.C. Popescu, Kinetic and morphological investigation of copper electrodeposition from sulfate electrolytes in the presence of an additive based on ethoxy-acetic alcohol and triethyl-benzyl-ammonium chloride, *Mat. Chem. Phys.* (2001), 72, pp. 332-336. (ISI)
- L. Muresan, **S. Varvara**, G. Maurin, S. Dorneanu, The effect of some organic additives upon copper electrowinning from sulphate electrolytes, *Hydromet.* (2000), 54, (2-3), pp. 161-169. (ISI)
- L. Muresan, A. Nicoara, G. Maurin, **S. Varvara**, Influence of Zn²⁺ ions on copper electrowinning from sulphate electrolytes, *J. Appl. Electrochem.* (1999), 29, 6, pp. 719-727. (ISI)

4. Chapters in scientific monographs/ volumes printed by publishing houses

2. P. Ricciardi, **S. Varvara**, B. Fabbri, S. Gualtieri, M. Gligor - *Analisi archeometriche su ceramica neolitica ingobbata e dipinta (cultura di Lumea Noua, V millennio a.C.) da siti in Transilvania (Romania)*, in S. Gualtieri, B. Fabbri, G. Bandini (Eds.), *Le classi ceramiche. Situazione degli studi. Atti della 10a Giornata di Archeometria della Ceramica (Roma, 5-7 aprile 2006)*, Casa Editrice Edipuglia, Bari, 2009, p. 73-82 (ISBN 9788872285671)
- B. Fabbri, S. Gualtieri, **S. Varvara**, M. Gligor - *Archaeometric characterisation of Foeni pottery from the Alba Iulia-Lumea Noua archaeological site (Romania)*, in C. Cosma, S. Varvara, M. Gligor (Eds.), *Vârste absolute prin metode nucleare de datare*, Ed. Quantum, Cluj-Napoca, 2008, p. 128-139. (ISBN 978-973-88835-0-5)
- B. Ciută, C. Florescu, M. Gligor, P. Mazăre, C. Şuteu, **S. Varvara** - *A history lesson: pottery manufacturing 8000 years ago*, Aeternitas Publisher, Alba Iulia, 2007, 146p (ISBN 978-973-7942-86-9).

5. Hirsch index = 13

B. Research Projects

1. "Innovative technologies for advanced recovery of waste materials from computer and telecommunications equipments", PN-III-P1-1.2-PCCDI-2017-0652, 2018-2021 (project responsible for Partner P3-UAB)
2. "Development of some innovative products from advanced materials (mortars), used in the rehabilitation of heritage buildings", PN-III-P2-2.1-PED-2019-3739, 2020-2022 (team member, project manager: Assoc. Prof. dr. Dorin Popa, UAB)
3. "Optimization of execution technologies regarding the rehabilitation of heritage buildings affected by humidity", cod PN-III-P2-2.1-BG-2016-0302, 2016-2018 (team member, project manager: Assoc. Prof. dr. Dorin Popa, UAB)
4. "Corrosion protection of archaeological bronze: an interdisciplinary characterization by modern experimental methods", Grant CNCSIS 17/2009 (project manager)
5. "Corrosion resistant composite coatings produced by electrolytic copper nanoparticles codeposition", grant CNCSIS- A/7/1469/2008-2009, (team member, project manager: Prof. dr. Liana Muresan, "Babeş-Bolyai" University, Cluj-Napoca, Romania)
6. "Vârste absolute prin metode nucleare cu aplicații în arheologie, geologie și mediu" (2006-2008) - CEEX Project (Contract nr. 749/P2/2006) (project responsible for UAB Partner)
7. "Studiul dinamicii parametrilor antropogenetici prin raportare la elemente bioarheologice descoperite în bazinul Muresului Mijlociu" (2006-2008) - CEEX Project (Contract nr 2-CEX 06-11-25/31.07.06) (project responsible for UAB Partner)
8. "South-Eastern European Pottery: Archaeology and Scientific Techniques" (SEE PAST) - International project (Italia-Slovenia-Romania) financed by European Union through "Culture 2000" (2006-2007) – (Project responsible for Romanian team)
9. "Investigații de natură chimică, fizică, structurală și tehnologică asupra ceramicii preistorice aparținând culturilor Vinča, Lumea Nouă și Petrești" (2004-2006) - Grant CNCSIS type A, code 670. (project manager)
10. "Etude des inhibiteurs organiques non-nocifs à la protection des patines de bronzes archéologiques", Romania-France-Croatia cooperation within the ECONET project no. 10279NA-2006, and project no. 10279NA-2005 financed by the EGIDE programme (France) (team member, project manager, Dr. Hisasi Takenouti, LISE, Université Pierre et Marie Curie, Paris, France)

11. "Archaeometric investigations on the provenance and technological aspects of the Neolithic painted pottery (4th Millennium b. c.) from Transylvania (Romania)", Romania-Italy cooperation, grant G8/01426/2005 of the EU program COST
12. "Studiul cronoamperometric al procesului de electrocristalizare a cuprului din soluții acide în prezența aditivilor organici" (2002-2003), Grant CNCSIS type AT, code CNCSIS 46. (project manager)
13. "Electrochemical impedance spectroscopy studies of the metal/electrolyte interface: The case of copper electrodeposition in the presence of additives", grant A49/2002, grant A100/1074/2001, and grant A100/134/2000 of the National University Research Council (team member, project manager: Prof. dr. Liana Muresan, "Babes-Bolyai" University, Cluj-Napoca, Romania)
14. "Electrochemical recovery of some heavy metals from residual water and solid industrial waste", grant 2/110/1999 of the National University Research Council (team member, project manager: Prof. dr. Liana Muresan, "Babes-Bolyai" University, Cluj-Napoca, Romania)

Associate Prof. Simona Camelia VARVARA, PhD

Alba Iulia, February 16th, 2021