

## Europass curriculum vitae



### Personal information

Surname(s) / First name(s)

Address(es)

Telephone(s)

E-mail(s)

Nationality

Date of birth

Gender

**Surleva, Andriana Risk**

Home: Bl.60, ent. B, ap. 304, quatr. "Studentski grad", 1700 Sofia, Bulgaria

Office: 8 „Kl. Ohridski“ blvd., Analytical Chemistry dep., University of Chemical Technology and Metallurgy, 1756 Sofia, Bulgaria

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asurleva@mail.bg; asurleva@my.uctm.edu

Bulgarian

01.05.1971

female

### Work experience

Dates

**February 2015 – assoc. professor in Analytical Chemistry**

2010-2015 – chief assistant professor of Analytical Chemistry

2000 –2010 assistant professor of Analytical Chemistry

Occupation or position held

Education and research

Main activities and responsibilities

Lecturer in Analytical Chemistry (in Bulgarian for chemical technologies and biotechnology courses), Analytical Chemistry and Instrumental Analysis (in English for Metallurgy courses). Starting from February 2014 lecturer in Instrumental methods of Analysis (in French for Engineering Chemistry course) (Annex 1). Lab tutorial, seminars and assignments: Analytical Chemistry and Instrumental Methods (in Bulgarian, English and French); new lab exercises and teaching documentation development. Supervising of student's research work and practical stage. Development and supervising extracurricular students' activities. Research activities in the domain of electrochemical and spectral analysis; flow injection techniques; environmental analysis; analytical methods and chemical sensors development.

Name and address of employer

**University of Chemical Technology and Metallurgy, 8 "Kl. Ohridski" blvd., Sofia, Bulgaria**

Type of business or sector

education

### Education and training

Dates

**2012 Post-doc stage granted by AUF and the Romanian Ministry of Foreign Affairs**

**Project "Spectrophotometric method for cyanide determination"**

Principal subjects/Occupational skills covered

Spectrophotometric methods for free cyanide and cyanogens determination based on ninhydrin reaction, sample preparation techniques and cyanide extraction. The method developed during the post-doc stage was applied in the MS biochemistry course curriculum at the Faculty of Chemistry, Alexandru Ioan Cuza University.

Dates

**2010 PhD in Analytical Chemistry**

**Thesis "New generation of ion-selective cyanide membranes for flow injection application"**

Name and type of organisation providing education and training

University of Chemical Technology and Metallurgy, Sofia, Bulgaria

Principal subjects/Occupational skills

Electrochemical deposition techniques; electroanalytical methods; ion-selective detectors

covered

(preparation and characterization); batch and flow-injection analysis; environmental analysis (heavy metals and cyanide determination); wet analytical methods; sample preparation; development of a method for WAD cyanide determination.

Name and type of organisation providing education and training

University of Chemical Technology and Metallurgy, Sofia, Bulgaria

**Dates**

**1994 MSc in Chemical technology of semiconducting materials**

Name and type of organisation providing education and training

University of Chemical Technology and Metallurgy

Principal subjects/Occupational skills covered

Technology and analysis of suprapure substances; chemistry and physics of semiconductors; chemical technology of semiconductors

Level in national or international classification

Engineer



**Personal skills and competences**

Mother tongue(s)

**Bulgarian**

Other language(s)

Self-assessment

European level (\*)

**English**

**French**

**Russian**

Understanding		Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production	
B1	Independent user	B2	Independent user	B2	Independent user	B2	Independent user
B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user
A2	Basic user	B1	Independent user	A1	Basic user	A1	Basic user

(\*) Common European Framework of Reference (CEF) level

Social skills and competences

As a student's instructor and tutor I have gained good social skills and team spirit. I have taught students from Turkey, Macedonia, Greece, and Romania as well as Bulgarian students of different ethnicity. The work is related with development of good skills in persuasion and dealing with difficult situations. Since 2009 I've been a member of University's group working on a development of close relations between secondary schools and University of Chemical Technology and Metallurgy.

Organisational skills and competences

Good skills in tasks and time management are very important in the teaching process. The skills in presentation of scientific work and results were proved at some scientific conferences. Project leader of two research project granted by University of Chemical Technology and Metallurgy, Sofia, Bulgaria. Member of management team of the project "Centre of mathematical Modelling and Computer Simulation for development of young researchers" granted by the European Social Fund of European Union. As a coordinator of the activity of target group I'm responsible for organising workshops and working meetings between the project participants and industry, maintaining the communication between the participants and the project coordinators, studying the participants' aptitudes by regular surveys, reports and documentation maintain.

Technical skills and competences

One of the tasks of my PhD research was the assembling of an analytical set of instruments combining different items: a flow-injection system in which a detector cell and a reference electrode as well as the interface for data acquisition were "home made". Since 2011 - a member of problem-solving team of "Metrohm-Bulgaria" Ltd (external expert).

Computer skills and competences

MS Office; Adobe Programs; Origin lab; Internet (www); e-mail; data base).

Artistic skills and competences

Bulgarian Folk dance: I'm a member of folk dancing group "Pendari". A coordinator and author of a project aimed at extracurricular work in the domain of Bulgarian folklore songs with children at ages from 8 to 17 (2009).

Driving licence(s)

Driving licence class B

**References**

prof. Gabi Drochioiu, Alexandru Ioan Cuza University, Iasi, Romania, gabidr@uaic.ro

assoc. prof. Latinka Kostadinova, University of Chemical Technology and Metallurgy, Sofia, Bulgaria, [lks@uctm.edu](mailto:lks@uctm.edu)  
assoc. prof. Rajna Tchavdarova, University of Chemical Technology and Metallurgy, Sofia, Bulgaria  
[rayna.tchavdarova@yahoo.com](mailto:rayna.tchavdarova@yahoo.com)

## Research interests

chemical sensors; environmental contaminants determination; fluorescent probes; flow injection analysis, method development, wet chemistry methods,

## Now-how

BG patent № 65705/26.08.2009r.  
"Method for electrochemical preparation of thin metal sulphide layers from aqueous electrolytes",  
M. Neshkova, N. Stojneva, A. Surleva

## Publications

Author and co-author of 28 scientific publications (Annex 2) and 3 students books (Annex 1)

## Conference presentations

4 oral and 21 poster presentations (Annex 3)

## Prizes, Funding and Awards

incoming motilities, grants awarded: May 2016: Erasmus Mundus Green IT: one month academic staff mobility in the University of Monastir, Tunisia  
September 2015: Erasmus Mundus Electra project: one month academic staff mobility in the National Agrarian University of Armenia  
2013: Erasmus academic staff mobility - teaching activities in Faculty of Chemistry, University of Iasi, Romania (8h).  
2013: Research project funded by University of Chemical Technology and Metallurgy  
2012 – 2014: project "Centre of mathematical Modelling and Computer Simulation for development of young researchers" granted by the European Social Fund of European Union  
2013-2014: Students practical stage – supervisor of 15 students, funded by the Bulgarian Ministry of Education and the European Social Fund of European Union  
2012: Post doc stage "Eugen Ionescu 2012-2013" by AUF and the Romanian Ministry of Foreign Affairs, February - July 2012

## Supplements

2015: Special price of Romanian Inventors forum, EUROINVENT 2015, Iasi, Romania  
2015: Gold medal, EUROINVENT 2015, Iasi, Romania  
2012: Gold medal, EUROINVENT 2012, Iasi, Romania  
2012: 11th Meeting of Food Chemistry, 16-19 September 2012, Braganza, Portugal, participation funded by the Bulgarian ministry of education and the European Social Fund of European Union  
2011: Research project funded by University of Chemical Technology and Metallurgy

1. List of teaching courses and teaching books
2. List of selected publications
3. List of selected conference presentations

More details:

<https://scholar.google.bg/citations?user=gbQhEaQAAAAJ&hl=en>  
[https://www.researchgate.net/profile/Andriana\\_Surleva](https://www.researchgate.net/profile/Andriana_Surleva)

<https://www.facebook.com/andriana.surleva>

### ***Annex 1 List of teaching courses and books***

1. 2011, 2015 - *Analytical Chemistry*: acid-base, complexing, redox and heterogeneous equilibria, volumetry and gravimetry (curriculum 60 h lectures and 60 labs) *in Bulgarian* for bachelor students in professional specialties: organic and inorganic chemical technology and engineering chemistry.
2. 2012 - *Analytical chemistry*: acid-base, complexing and redox equilibria, volumetry, potentiometry, voltammetry, spectrophotometry, atomic-absorption spectrometry, atomic emission spectrometry (curriculum 30 h lectures and 45 labs) *in English* for bachelor students in metallurgy
3. 2014 -2015, *Instrumental analytical methods*: spectral methods, chromatography, mass spectrometry (45 h lectures and 25 labs) *in French* for master students: chemical and biochemical engineering.
4. 2000 – till now - lab tutorial in Bulgarian –Analytical Chemistry: seminars, labs and assessments (60 h); Instrumental analytical chemistry: seminars, labs and assessments (48 h);
5. 2013 –lab tutorial in French –Analytical Chemistry: seminars, labs and assessments (60 h);

#### Books:

1. Analytical chemistry – lab manual, 2002 – co-author
2. Calculations in analytical chemistry – part I (2007) – co-author
3. Calculations in analytical chemistry – part II (2013) – co-author

### ***Annex 2 List of Selected Publications***

1. D. Stratiev, V. Yankov, I. Petrov, I. Shishkova, A. Pavlova, P. Ivanova, A. Surleva, K. Hristov, E. Todorova, A. Obryvalina, R. Telyashev, Study on the origin of sediment formation in a high pressure near zero sulfur diesel hydrotreater, *Fuel Processing Technology* 126 (2014) 332–342
2. A. Surleva, P. Atanasova, T. Kulusheva, L. Costadinova, Study of the complex equilibrium between titanium (iv) and tannic acid, *Journal of Chemical Technology and Metallurgy*, 49, 6, 2014, 594–600
3. A. Surleva, G. Drochioiu, A modified ninhydrin micro-assay for determination of total cyanogens in plants, *Food Chem.* 141 (2013) 2788–2794
4. N. I. Georgiev, I. S. Yaneva, A. R. Surleva, A. M. Asiric, V. B. Bojinov, Synthesis, sensor activity and logic behavior of a highly water-soluble naphthalimide derivative, *Sens. Actuat. B* 184 (2013) 54–63
5. A. Surleva, G. Drochioiu, Visualizing Smoking Hazard: A Simple Spectrophotometric Determination of Hydrogen Cyanide in Cigarette Smoke and Filters, *J. Chem. Educ.* 90 (2013) 1654–1657
6. A. Surleva, S. Bancila, E. Todorova, A study on ninhydrin reaction with weak acid dissociable cyanide and its application for toxic cyanide determination, *Science J. Anal. Chem.* 2(1) (2014) 1-6
7. A. Surleva, M. Zaharia, L. Ion, R. Gradinaru, G. Drochioiu, I. Mangalagiu, Ninhydrin-based spectrophotometric assays of trace cyanide, *Acta Chem. Iasi*, 21 (2013) 57-70
8. A. Surleva, R. Gradinaru, G. Drochioiu, Cyanide poisoning: from physiology to forensic analytical chemistry, *Int. J. Criminal Invest.*, 2(2), (2012) 79-101
9. T. K. Nedeltcheva, A. R. Surleva, L. G. Nikolova, R. G. Borissova, S. I. Georgieva, Spectrophotometric study of competitive complexation equilibria involving overlapped spectral responding species: Determination of the stability constant of bismuth-pyrophosphate complex, *Cent. Eur. J. Chem.*, 10 (2012) 1875-1881.

10. L. Nikolova, A. Surleva, T. Hedeltcheva, R. Borissova, Algorithm for spectrophotometric study of 1:1 stoichiometric complexes at overlapped spectra of the complex and the ligand, *J Chem. Techn. Metall*, 46 (2011) 203-208
11. N. A. Stoilova, A. R. Surleva, G. Stoev, Simultaneous Determination of Nine Quinolones in Food by Liquid Chromatography with Fluorescence Detection, *Food Anal. Methods* 6 (3) (2012) 803-813
12. N. A. Stoilova, A. R. Surleva, G. Stoev, Quinolones determination in food of animal origin by liquid chromatography coupled with fluorescence and mass spectrometric detection, *Acta Chromatographia*, DOI: 10.1556/AChrom.26.2014.4.3
13. G. Yonkova, V. Zhivkova, A. Surleva, The use of fluoride containing mineral water in wort production, *Scientific Study & Research. Chemistry & Chemical Engineering, Biotechnology, Food Industry*, 12 (4) (2011) 373-380
14. G. Yonkova, A. Surleva, T. Ginova-Stoyanova, Technology for production of fluoride enriched beer, *J Chem. Techn. Metall* 47 (1) (2012) 53-58
15. G. Jonkova, A. Surleva, Impact of polysaccharides of malt on filterability of beer and possibilities for their reduction by enzymatic additives, *J Chem. Techn. Metall.*, 48, 3, 2013, 234-240
16. D. Tsekova, E. Makakova, P. Alov, G. Gornev, I. Pajeva, L. Tancheva, V. Petkov, A. Surleva, B. Escuder, J. Miravet, E. Katz, Structure-activity relationships of new L-valine derivatives with neuropharmacological effects, *Bulg. Chem. Commun.* 41 (2009) 133-137
17. A. Surleva, "Electrochemical detection in environmental cyanide monitoring: review" *Revue électronique internationale pour la science et la technologie*, 3 (2009), [www.revue-genie-industriel.info/document.php?id=812](http://www.revue-genie-industriel.info/document.php?id=812).
18. Surleva, V. Nikolova, M. Neshkova, A new generation of cyanide ion-selective membranes for flow-injection application. Part. II. Comparative study of cyanide flow-injection detectors based on thin electroplated silver chalcogenide membranes, *Anal. Chim. Acta*, 583 (2007) 174-181
19. A. Surleva, M. Neshkova, A new generation of cyanide ion-selective membranes for flow-injection application. Part III. A simple approach to the determination of toxic metal-cyanide complexes without preliminary separation, *Talanta*, 76 (2008) 914-921.

### ***Annex 3 List of Selected Conference Presentations***

1. A. Surleva, S. Terzieva, N. Penkova, An effective environment for specialized education of young researchers – a satisfaction feedback, Anniversary Scientific Conference with international participation: 60 Years UCTM, 4-5 June 2013, UCTM, Sofia, Bulgaria
2. A. Surleva, V. Stojanov, Gabi Drochioiu, Ninhydrin as a sensitive colorimetric reagent for weak acid dissociable cyanide determination, Anniversary Scientific Conference with international participation: 60 Years UCTM, 4-5 June 2013, UCTM, Sofia, Bulgaria
3. A. Surleva, N. Georgiev, "A new fluorescent probe for toxic cyanides sensing in aqueous media", In: A.-V. Sandu (Ed.) European exhibition of creativity and innovation, EUROINVENT 2012, Alexandru Ioan Cuza Univ. Publ. House, Iasi, Romania, pp. 275-282 (2012).

4. A. Surleva, G. Drochioiu, Fast and Highly Sensitive Determination of Total Cyanogens with Ninhydrin, 11th Meeting of Food Chemistry. Quality of food: new challenges. 16-19 September 2012, Bragança, Portugal.
5. A. Surleva, M. Zaharia, R. Grădinaru, I. Mangalagiu, G. Drochioiu, Development and validation of a spectrophotometric method for estimation of cyanogens in plant samples, XXXII Romanian Chemistry Conference, 3-5 octomber 2012, Calimanesti-Caciulata , Valcea, Romania
5. N. Stoiliva, A. Surleva, G. Stoev, ‘Simultaneous determination of nine quinolones in food of animal origin by liquid chromatography with fluorescence detection’, 29<sup>th</sup> international Symposium on Chromatography, 9 - 13 September 2012 in Toruń, Poland
7. M. Neshkova, A. Surleva, A new generation of cyanide ion-selective membranes for flow-injection application. Part III. An electrochemical protocol for on-line cyanide speciation, Workshop on Ecomaterials and Processes: Characterization and Metrology, April 19-21, 2007, St. Kirik, Plovdiv, Bulgaria
8. M. Neshkova, A. Surleva, Flow injection cyanide monitoring and speciation using a new generation of CN-potentiometric detectors based on thin electroplated silver chalcogenide membranes, EUROANALYSIS XIV, 9-14 September 2007, Antwerp, Belgium