



## Europass Curriculum Vitae



### Personal information

First name(s) / Surname(s) **Kledi Xhaxhiu**  
 Address(es) Fakulteti i Shkencave Natyrore, Blv. "Zog I", 1001 Tirana, Albania  
 E-mail kledi.xhaxhiu@unitir.edu.al  
 Nationality Albanian  
 Date of birth 20.08.1977  
 Gender Male

### Present occupation

**LECTURER AND RESEARCHER**

### Work experience

<p>Dates <b>06.03.2006 onwards</b></p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p>	<p>Lecturer &amp; researcher in the Department of Chemistry, Faculty of Natural Sciences, University of Tirana.</p> <p>Preparation of lectures, seminars and practical courses of Colloid Chemistry, Crystallography and Molecular Spectroscopy for the students of Chemistry branch.</p> <p>Preparation of lectures, seminars and practical courses of Colloid Chemistry for the students of Food Chemistry branch.</p> <p>Preparation of practical courses of Physical &amp; Colloid Chemistry for the students of Pharmacy branch.</p>
<p>Name and address of employer</p> <p>Type of business or sector</p>	<p>Fakulteti i Shkencave Natyrore, Blv. "Zog I", 1001, Tirana, Albania</p> <p>High education</p>
<p>Dates <b>10.2007 – 02.2008, 10.2009 – 02.2010</b></p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p>	<p>Invited lecturer in the Department of Civil Engineering, Faculty of Civil Engineering and Architecture, Epoka University (private English speaking university in Tirana).</p> <p>Preparation of lectures and seminars of General Chemistry for the students of Civil Engineering branch.</p>
<p>Name and address of employer</p> <p>Type of business or sector</p>	<p>Epoka University, Rruga e Durrësit, 1001, Tirana, Albania</p> <p>High education</p>
<p>Dates <b>10.2007 – 02.2008, 10.2008 – 02.2009</b></p> <p>Occupation or position held</p>	<p>Invited lecturer in the Department of Pharmacy, Faculty of Medicinal Sciences, Kristal University (private university in Tirana).</p>

Main activities and responsibilities	Preparation of lectures, seminars and practical courses of Physical and Colloid Chemistry for the students of Pharmacy branch.
Name and address of employer	Universiteti Kristal, Autostrada Tiranë-Durrës km. 3-të, Tirana, Albania
Type of business or sector	High education
<b>Education and training</b>	
Dates	<b>09.1996 – 02.2002</b>
Title of qualification awarded	Chemist (GPA 9.7/10)
Principal subjects/occupational skills covered	Diploma work and thesis in the Department of Analytical Chemistry, Faculty of Chemistry-Biology, University of Siegen, Germany (Title: <i>Extraction of orange peel essential oil with SFE (supercritical fluid extraction); USE (ultrasonic extraction) and Soxhlet extraction</i> ). Under the supervision of Prof. Dr. rer. nat. B. Wenclawiak.
Name and type of organisation providing education and training	9 Semesters completed in the Faculty of Natural Sciences, University of Tirana (Albania), 1 Semester (Diploma work) in the Department of Chemistry, University of Siegen (Germany)
Level in national or international classification	ISCED 5B
Dates	<b>19.01 – 28.02.2004</b>
Title of qualification awarded	Internship Certificate
Principal subjects/occupational skills covered	Internship at the Incorporated Company BASF A.G., Ludwigshafen, Germany, in the Session for Intermediate Product Research (Elaborated topics: <i>Production of Precursor-solutions for doped Barium Titanate; Thermolysis and production of samples for analytical investigations; Optimisation of the electrical properties of Barium Titanate</i> ).
Name and type of organisation providing education and training	Incorporated Company BASF A.G., Ludwigshafen, Germany
Level in national or international classification	Internship
Dates	<b>03.2002 – 11.2005</b>
Title of qualification awarded	Dr. rer. nat. (Evaluation: "excellent" for the disputation; "excellent" for the dissertation)
Principal subjects/occupational skills covered	PhD-thesis in the department of Inorganic Chemistry, University of Siegen (Title: <i>The use of supercritical carbon dioxide in Solid State Chemistry and basic structural investigations with chalcogenide halides of the third main group</i> ). Under the supervision of Prof. Dr. H. -J. Deiseroth.
e-dissertation	<a href="http://www.ub.uni-siegen.de/epub/diss/xhaxhiu.htm">http://www.ub.uni-siegen.de/epub/diss/xhaxhiu.htm</a>
Name and type of organisation providing education and training	Department of Chemistry, University of Siegen (Germany)
Level in national or international classification	ISCED 6
Dates	<b>01.10.2011 – 31.12.2011</b>
Principal subjects/occupational skills covered	Implementation of the DAAD (Deutsche Akademischer Austausch Dienst) supported scientific research on: "The investigation of structure-property relationship of the recently synthesised chalcogenide halides of the 3 <sup>rd</sup> main group elements with regard to photovoltaic and thermoelectric efficiency".
Name and type of organisation providing education and training	Institute of Mineralogy, Crystallography and Material Science, University of Leipzig (Germany)
Dates	<b>25.06.2012 – 08.07.2012</b>

Principal subjects/occupational skills covered

Participation and presentation in the 2<sup>nd</sup> International Workshop on Cleanroom Training for Critical and Sustainable Technologies. A collaborative initiative between UNIDO and UNAM – İhsan Doğramacı Bilkent University. Supported by the Turkish Ministry of Science, Industry & Technology, Turkish International Cooperation and Coordination Agency, Turkish Ministry of Development.

Name and type of organisation providing education and training

National Excellent Centre in Nanotechnology, UNAM- Ankara, Turkey

Dates

**23.10.2012 – 25.10.2012**

Principal subjects/occupational skills covered

Train the New Trainers (TrainMIC). Training programme on the use of metrology in Chemistry.

Name and type of organisation providing education and training

Institute for Reference Materials and Measurements (IRMM), Geel, Belgium

## Academic Qualifications

Dates

**29.09.2010**

The Professors Council of the Faculty of Natural Sciences, University of Tirana awards the academic title “**DOCENT**” in accordance to the fulfilment of the requirements by the Law of High Education, No. 9832 (12.11.2007), in the Republic of Albania.

Dates

**04.05.2012**

The Professors Council of the Faculty of Natural Sciences, University of Tirana awards the academic title “**Associate Professor**” in accordance to the fulfilment of the requirements by the Law of High Education, No. 9832 (12.11.2007), in the Republic of Albania.

## Personal skills and competences

Mother tongue(s)

**Albanian**

Other language(s)

Self-assessment

*European level (\*)***English****German****Italian****French**

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
Basic user	Basic user	Basic user	Basic user	Basic user

## Social skills and competences

Excellent social skills as a result of a long period of international team working and teaching in several universities in Albania. Easy adaptable to multicultural environments and to working in multi-language, multicultural and international environments as a consequence of 4 years of study and research in Germany as well as due to the co-working with people of different backgrounds and proveniences during the internship in BASF-company (Ludwigshafen, Germany), and the co-research in Aristotle University (Thessaloniki, Greece). Good communication and presentation skills gained during the undergraduate and graduate level courses as well as the participations in diverse international and national symposia and conferences. My personality is characterised by an enhanced sense of responsibility toward the relationships with others and an enthusiastic team spirit concerning the implementation of works in group.

<b>Organisational skills and competences</b>	Natural leadership and organisational skills cultivated over years and demonstrated by the supervision of practical work with students, orientation of diploma and master thesis, preparation and implementation of undergraduate and graduate courses for various disciplines as well as organisation of research and social activities in the Faculty of Natural Sciences.
<b>Technical skills and competences</b>	During the diploma and PhD thesis performed in the Department of Chemistry (Analytical and Inorganic), University of Siegen, Germany I gained a lot of experience concerning the sample preparation (for gas, liquid supercritical (Suprex prepmaster fluid extraction system) and solid materials) and analysing instrumentation (GC-FID/MS, Powder and Single Crystal X-ray diffractometry (RT and HT), DSC, DTA, TG, IR, Raman, Gas and Hg Porosimetry, etc. An innovative task demanded for the implementation of a part of the PhD thesis was the designation of two types of stainless steel batch reactors acting as contra-pressure agent holder for the purpose of the synthesis of inorganic species in supercritical CO <sub>2</sub> (at high pressures and temperatures) running in sealed quartz ampoules inside them. Despite the experience in solid state and hydrothermal synthesis techniques, the sample preparation through sol-gel technique and its programmed decomposition in controlled atmosphere learned and implemented in the inorganic laboratory BASF A. G., enriched further my know-how in this field.
<b>Computer skills and competences</b>	<ul style="list-style-type: none"> <li>➤ Good command of Operating Systems: MS Windows 95, 98, 2000, XP, 7</li> <li>➤ Very good command of Microsoft Office tools (Word, Excel and PowerPoint)</li> <li>➤ Good command of most of the standard and special Windows software packages concerning data acquisition and processing for structure solution and refinement (WinGX, Shelxs, Shelxl, X-prep, X-red, Stoe, Fullprof), TA-WIN (Linseis software package)</li> <li>➤ Good command of structure and graphic design software: Diamond v. 2, 3, Corel Draw v. 7, 8, 11, 12</li> <li>➤ Good command of data analysis and graphing software: Origin v. 6, 7</li> <li>➤ Good command of graph design and editing software: Adobe Photoshop, Corel Photo-Paint, Ulead® Photo Impact</li> <li>➤ Some experience with technical Computing Software: Mathematica 4.2</li> <li>➤ Basic knowledge of Matlab environment and programming language</li> </ul>
<b>Hobbies and sports</b>	Handicraft construction of mechanical structures and objects needed for several practical purposes, reparation of mechanical and various electrical objects as well as old car engines Swimming, chess playing.
<b>Driving licence</b>	Category B
<b>Publications</b>	<p>L. Kienle, O. Oeckler, H. Mattausch, V. Duppel, A. Simon, C. Reiner, M. Schlosser, K. Xhaxhiu, H.-J. Deiseroth, (2003) "Real structure of partially ordered crystals", <i>Materials Science in Semiconductor Processing</i>, <b>6</b>, 393-396.</p> <p>H.-J. Deiseroth, C. Reiner, K. Xhaxhiu, M. Schlosser, L. Kienle, (2004) "X-Ray and Transmission Electron Microscopy Investigations of the New Solids In<sub>5</sub>S<sub>5</sub>Cl, In<sub>5</sub>Se<sub>5</sub>Cl, In<sub>5</sub>S<sub>5</sub>Br and In<sub>5</sub>Se<sub>5</sub>Br" <i>Zeitschrift für Anorganische und Allgemeine Chemie</i>, <b>630</b>, 2319-2328.</p> <p>X. Jiang, H.-J. Deiseroth, C. Gu, K. Xhaxhiu, Y. Huang, J. Li, (2008) "Electrical conductivity of mixed Valence TlIn<sub>4</sub>S<sub>5</sub>Cl quaternary compound micro- and nanowires", <i>Nanotechnology</i>, <b>19</b>(20), 205702 (5pp).</p> <p>V. Nickel, C. Reiner, M. Schlosser, H.J. Deiseroth, L. Kienle, K. Xhaxhiu, (2008) "The New Crystalline Mixed Valent Solids TlIn<sub>4</sub>Se<sub>5</sub>X (X: Cl, Br) and TlIn<sub>4</sub>S<sub>5</sub>Cl: Structure and Nanoscopic Defects Investigated by Combined Application of X-ray and HRTEM Studies", <i>Zeitschrift für Anorganische und Allgemeine Chemie</i>, <b>634</b>, 2209-2216.</p> <p>K. Xhaxhiu, A. Korpa, B. Seiti, A. Memo, (2011) A Review of Solid Inorganic Photovoltaics and Thermoelectrics. <i>Albanian Journal of Natural and Technical Sciences</i>, <b>30</b>(1), 39-65.</p> <p>A. Korpa, K. Xhaxhiu, A. Mele, K. Dule, (2011) Turning waste into highly valuable material; clinker-free cements based on chemical activation of granulated blast furnace slag. <i>Albanian Journal of Natural and Technical Sciences</i>, <b>30</b>(1), 91-109.</p>

- K. Xhaxhiu, A. Mele, A. Memo, B. Seiti, T. Kota, K. Dule, (2012) A New Way of Syntheses of Rubidium- and Cesium Triiodides in Supercritical Carbon Dioxide. *Asian Journal of Chemistry*, **24(9)** 3879-3883.
- K. Xhaxhiu, A. Çomo, T. Kota, Synthesis of Inorganic Species in Supercritical CO<sub>2</sub>. (2012) How feasible are they?, *Journal of Environmental Protection Ecology*, **13(1)** 144-154.
- K. Xhaxhiu, R. Terziu, A. Mele, E. Troja, T. Kota, (2012) Characterisation of steam-extraction progress of some medicinal plants based on the evolution of physical-chemical parameters of their hydrolates. *Fresenius Environmental Bulletin*, **21(10a)** 3108-30113.
- B. Seiti, D. Topi, A. Korpa, A. Lame, K. Xhaxhiu, I. Beqiraj, (2012) Phenolic content of the Effluents from the petroleum industry in Albania. *Oxidation Communications*, **35(3)** 742-750.
- K. Xhaxhiu, Mele, A. Korpa, B. Seiti, S. Abazi, A. Memo, T. Kota, K. Dule, (2012) Sequestration of CO<sub>2</sub> in supercritical state by mercury oxide. *Chemical Papers* (submitted).
- K. Xhaxhiu, A. Mele, A. Korpa, B. Seiti, K. Dule, T. Kota, (2012) A Self made lab-scale system for syntheses in supercritical CO<sub>2</sub>. *Brasilian Journal of Chemistry* (submitted).

## Conference contributions

- K. Xhaxhiu, A. Çomo, T. Kota, Synthesis of Inorganic Species in Supercritical CO<sub>2</sub>. (2009) How feasible are they?, ***Proceedings of The International Conference of BENA "Pollution Management and Environmental Protection"***. Tirana, September 16-20, (published in *JEPE* 13(1) 144-154).
- K. Xhaxhiu, R. Terziu, A. Mele, E. Troja, T. Kota, (2011) Characterisation of steam-extraction progress of some medicinal plants based on the evolution of physical-chemical parameters of their hydrolates. ***Proceedings of the 16<sup>th</sup> International Symposium on Environmental Pollution and Its Impact on Life in the Mediterranean Region***. Ioannina, September 24-27, (published in: *FEB* 21(10a) 3108-30113 (2012)).
- K. Xhaxhiu, Mele, A. Korpa, B. Seiti, S. Abazi, A. Memo, T. Kota, K. Dule, (2011) Sequestration of CO<sub>2</sub> in supercritical state by mercury oxide. ***Proceedings of VI<sup>th</sup> Dubrovnik Conference on Sustainable Development of Energy, Water and Environment Systems***. September 25-29, Dubrovnik, pp 400.
- S. Abazi, K. Xhaxhiu, H. Fico, (2011) Analysis and Identification of Organic Compounds Contained in the Waste Waters Produced from the Steam Distillation Industry in Albania. ***Proceedings of VI<sup>th</sup> Dubrovnik Conference on Sustainable Development of Energy, Water and Environment Systems***. September 25-29, Dubrovnik, pp 474.
- B. Seiti, K. Xhaxhiu, D. Topi, A. Mele, A. Memo, A. Malja (2011) Evaluation of Some Characteristics of the Crude Oil Light Products Originating from the Main Oil Wells in Albania. ***Proceedings of VI<sup>th</sup> Dubrovnik Conference on Sustainable Development of Energy, Water and Environment Systems***. September 25-29, Dubrovnik, pp 396.
- K. Xhaxhiu, A. Korpa, B. Seiti, (2011) Some structural aspects of mixed valence solid inorganics containing indium. ***Proceeding of the National Conference: "Chemistry and the Actual Country Development"***. Academy of Sciences, Tirana, 20 October, pp 286-298. (in albanian).
- A. Korpa, A. Mele. K. Xhaxhiu, (2011) On the structure, obtained phases and the hydropuzolanic reaction progress of the ultra high performace materials containing cement compared to the common ones. ***Proceeding of the National Conference: "Chemistry and the Actual Country Development"***. Academy of Sciences, Tirana, 20 October, pp 90-106. (in albanian).
- A. Mele, A. Mele, A. Korpa, K. Xhaxhiu (2011) Chemical-physical changes of Na-montmorillonite clays after acid activation. ***Proceeding of the National Conference: "Chemistry and the Actual Country Development"***. Academy of Sciences, Tirana, 20 October, pp 26-34. (in albanian).

- B. Seiti, D. Papaj, D. Topi, K. Xhaxhiu, M. Prifti, (2011) Evaluation of protection efficiency of imidazolium chloride on coal containing steel in HCl environment. **Proceeding of the National Conference: Chemistry and the actual country development**. Academy of Sciences, Tirana, 20 October, pp. 16-25. (in albanian).
- K. Xhaxhiu, E. Keçi, A. Korpa, E. Spahiu, T. Kota, (2011) A study on the rate of the inhibition effect of six essential oils upon two bacterial colonies (*Staphylococcus aureus* and *Escherichia coli*). **Proceedings of the International Conference: "Biotechnological Developments"**. Tirana, 20-21 November, pp 330 - 337.
- E. Keçi, K. Xhaxhiu, A. Korpa, E. Spahiu, T. Kota, (2011) A study of the inhibitory effect of six essential oils toward *Candida albicans*. **Proceedings of the International Conference: "Biotechnological Developments"**. Tirana, 20-21 November, pp 180 -186.
- B. Seiti, I. Malollari, D. Topi, A. Memo, K. Xhaxhiu, (2011) The application of biological and physical-chemical methods for the treatment of petrol polluted mud and soil in Albania. **Proceedings of the International Conference: "Biotechnological Developments"**. Tirana, 20-21 November, pp 195 -202.
- A. Korpa, K. Xhaxhiu, (2011) Sustainable Construction Materials from Clinker Free Cements Based on Chemically Activated Ground Granulated Blast Furnace Slags. **FRAY INTERNATIONAL SYMPOSIUM: Materials Recycling, Silicon For Photovoltaic Cells And Boron & Borates**. Cancun, 27 November – 01 December, Vol. 4, pp 353.
- K. Xhaxhiu, K. Bente, M. Lorenz, (2012) Ternary and quaternary mixed valence compounds with interesting electrical properties. **Proceedings of the 20<sup>th</sup> Annual Meeting of the German Crystallographic Society (DGK)**. Munich, 12-15 March, pp 120.
- K. Xhaxhiu, E. Keçi, A. Korpa, B. Seiti, (2012) A study of the Inhibitory Effect of Six Essential Oils toward *Klebsiella Pneumoniae*. **Proceedings of the 5<sup>th</sup> International Conference on Water, Climate and Environment "BALWOIS"**. Ohrid, 28 May, 2 June, pp 1-7.
- K. Xhaxhiu, A. Korpa, A. Mele, A. Memo, T. Kota, I. Beqiraj, (2012) A Comparison of Supercritical CO<sub>2</sub> and Ultrasonic Extraction of Orange Peel Essential Oil using Lab-scale Apparatuses. **Proceedings of the 5<sup>th</sup> International Conference on Water, Climate and Environment "BALWOIS"**. Ohrid, 28 May, 2 June, pp 1-9.
- A. Korpa, K. Xhaxhiu, A. Mele, B Seiti, E. Spahiu, (2012) High Volume Fly Ash Cement an Economical Approach for Reducing the Pollution Impact of the Thermal Power Plant Byproducts in the Ohrid Area. **Proceedings of the 5<sup>th</sup> International Conference on Water, Climate and Environment "BALWOIS"**. Ohrid, 28 May, 2 June, pp 1-12.
- A. Korpa, B Seiti, A. Mele, K. Xhaxhiu, E. Spahiu, (2012) Efficient Ways of Industrial Waste Processing into High Value added Products that Combine Energy Recovery with Sustainable Development and Environmental Protection. **Proceedings of the 5<sup>th</sup> International Conference on Water, Climate and Environment "BALWOIS"**. Ohrid, 28 May, 2 June, pp 1-15.
- B. Seiti, A. Korpa, D. Topi, K. Xhaxhiu, E. Spahiu, F. Shehu, (2012) Evaluation of Possibilities and Deposition Capacities of CO<sub>2</sub> in Exploited Natural Gas Reservoirs, Albania. **Proceedings of the 5<sup>th</sup> International Conference on Water, Climate and Environment "BALWOIS"**. Ohrid, 28 May, 2 June, pp 1-10.
- K. Xhaxhiu, A. Korpa, A. Mele, T. Kota, K. Dule, (2012) Ultrasonic extraction characteristics of the albanian "moro" orange-peel cultivars. **Proceedings of the International Conference of Ecosystems (ICE)**, Tirana, 1-6 June, pp 1-7.
- K. Xhaxhiu, A. Korpa, A. Mele, B. Seiti, T. Kota, K. Dule, (2012) A comparison of ultrasonic and soxhlet extraction of the orange peel from "Moro" cultivars grown in Albania. **Proceedings of the International Conference of Ecosystems (ICE)**, Tirana, 1-6 June, pp 1-8.
- A. Korpa, K. Xhaxhiu, A. Mele, E. Spahiu, (2012) Development of "Green" cement for sustainable concrete using metallurgical waste. **Proceedings of the International Conference of Ecosystems (ICE)**, Tirana, 1-6 June, pp 1-10.
- A. Korpa, K. Xhaxhiu, A. Mele, E. Spahiu, E. Halimi, (2012) Contributing to ecosystem conservation via utilization of beneficiated high carbon fly ash for greener cement production. **Proceedings of the International Conference of Ecosystems (ICE)**, Tirana, 1-6 June, pp 1-10.



A. Mele, B. Murtaj, K. Xhaxhiu, A. Korpa, E. Tako, (2012) The surface characterisation of activated carbon and acid activated Montmorillonite clay. **Proceedings of the International Conference of Ecosystems (ICE)**, Tirana, 1-6 June, pp 749-752.

A. Mele, M. Çipa, K. Taraj, K. Xhaxhiu, E. Tako, (2012) Surface changes of bentonite clays after the modification with H<sub>2</sub>SO<sub>4</sub> and Nitrogen organic cations. **Proceedings of the International Conference of Ecosystems (ICE)**, Tirana, 1-6 June, pp 753-756.

B. Seiti, A. Korpa, D. Topi, K. Xhaxhiu, I. Beqiraj, (2012) Diversification of the Energetic Resources and the Utilisation of Biodiesel in Albania. **Proceedings of the International Conference of Ecosystems (ICE)**, Tirana, 1-6 June, pp 559-564.

K. Xhaxhiu, A. Korpa, H. -J. Deiseroth, R. Schmidt-Grund, M. Lorenz, K. Bente, (2012) The influence of targeted substitutions on physical properties of ternary mixed valence indium-chalcogenide-halides. **Proceedings of the 18<sup>th</sup> International Conference on Ternary and Multinary Compounds (ICTMC)**, Salzburg, 27-31 August, pp 121.

K. Xhaxhiu, H.-J. Deiseroth, R. Schmidt-Grund, K. Bente, (2012) Tuning of the Physical Properties in Mixed Valence Inorganic Solids by Oriented Cationic and Anionic Substitutions. **Beiträge der 16. Vortragstagung: Materialchemie für Energie- und Ressourcennutzung**, Darmstadt, 17-19 September. (published in: Zeitschrift für Anorganische und Allgemeine Chemie 638 (10) pp 1640).

### Professional Affiliations

since 04.1998 Member of the Albanian Chemists Association (ShKSh)  
2003 - 2006 Member of the German Chemists Association (GDCh)

### Annexes

More info regarding my academic aspect: <http://unitir.academia.edu/KlediXhaxhiu>