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| PERSONAL INFORMATION | Diāna Stamberga |
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|  | diana.stamberga@gmail.com [orcid.org/0000-0002-6336-3402](https://orcid.org/0000-0002-6336-3402) |
| Gender Female | Nationality Latvian | H1B Visa  |

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| WORK EXPERIENCE |  |

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| January 2020 – Present Augusts 2018 – January 2020 Sep 2015 – July 2018  | Technical Associate Staff MemberChemical Separations GroupUT-Battelle, LLC (Oak Ridge National Laboratory)1 Bethel Valley Rd, Oak Ridge, TN 3783, USA, www.ornl.gov* research in novel separation processes including design/synthesis and characterisation of novel compounds, development of experimental parameters and analytical methods
* participate in planning efficient workflow for the laboratories, including establishing priorities within and between projects and determining the most efficient methods and procedures with the support of Research Operations Support team

serve as **Laboratory Space Manager** for office space and all nonradiological synthesis and instrumental laboratories:establish and manage priorities of shared workspacesprovide on-site laboratory site-specific (SST) and safety trainings for guests and new staff* assist stuff and guests to ensure safe and secure laboratory operations with the support of Research Operations Support team
* participate in the review processes and update the RSSs covering non-radiological laboratories through RHACS

maintain inventory of lab materials and non-hazardous/hazardous chemicals using HMMIS system* manage nonradiological laboratory waste - assist researchers with disposing of waste, excess legacy chemicals and samples with support of WSR

coordinate installation of new laboratory equipment and guest visits for instrument maintenance and repairs* train instrument users and coordinate the use of instruments and facilities
* manage group property using eProp system
* serve as pressure system custodian and TPO
* request facility service through Facility Service Center
* maintain laboratory instrumentation including ICP-OES, GC, ReactRaman 785, EasyViewer 100, Total Inorganic Carbon Analyzer, HPGe and others; perform weekly liquid nitrogen fills for NMR instrument and biweekly liquid nitrogen fills for HPGe; custodian of laboratory instruments
* present and report research results at the group meetings, project meetings and conferences
* contribute to publishing scientific results in peer-reviewed journals and technical reports
* ensure compliance with environmental, safety, health, and quality program requirements

Postmaster Research AssociateChemical Separations GroupOak Ridge Associated Universities100 ORAU Way, Oak Ridge, TN 37830, USA, www.orau.org* synthesize and characterize novel organic compounds
* identify new synthesis routes for the compounds of interest
* participate in project planning and execution
* present and report research results at the group meetings, project meetings and conferences
* contribute to publishing scientific results in peer-reviewed journals
* maintain the NMR spectrometers by performing liquid nitrogen fills weekly; perform biweekly liquid nitrogen fills for HPGe
* maintain a stock of laboratory supplies
* ensure compliance with environmental, safety, health and quality program requirements

Research AssistantCNS Laboratory of Active CompoundsLatvian Institute of Organic Synthesis Aizkraukles 21, LV-1006, Riga, Latvia, www.osi.lv * developed multi-step synthesis of drug candidates
* characterized novel organic compounds using HPLC, GCMS, NMR, IR, EA etc.
* worked with a variety of synthesis techniques (manipulations under inert atmosphere, extraction distillation, crystallization, sublimation etc.)
* ensured compliance with environmental, safety, health and quality program requirements
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| EDUCATION AND TRAINING |  |

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| September 2015 – June 2017 | Master of Chemistry |  |
| University of Latvia, Riga, Latvia |
| * organic chemistry
* research advisors: Dr. Valerjans Kauss, Dr., Prof. Andris Zicmanis
* thesis “Synthesis of alicyclic α-amino acids”
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| April 2016 – August 2016 | Master of Chemistry (ERASMUS+ exchange) |  |
| Ruhr-Universität Bochum, Bochum, Germany |
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|  August 2011 – June 2015 | Bachelor of Chemical Engineering |  |
| Riga Technical University, Riga, Latvia  |
| * chemical engineering
* organic chemistry
* research advisor: Dr. Māris Turks
* thesis “Aziridine-triazole conjugates as a potential MMP inhibitors”
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| PERSONAL SKILLS |  |

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| Mother tongue(s) | Latvian |
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| Other language(s) | UNDERSTANDING  | SPEAKING  | WRITING  |
| Listening  | Reading  | Spoken interaction  | Spoken production  |  |
| English | C1 | C1 | C1 | C1 | C1 |
| Russian | B2 | B1 | B1 | B1 | B1 |
| German | A1 | A2 | A1 | A1 | A2 |
|  | Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient userCommon European Framework of Reference for Languages |

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| Job-related skills | * experience working in highly diverse, fast-phased R&D environment with specialists across several fields and engaging with employees, facility users, post-docs and student to support their work and assist with safety related concerns
* ability to work both in a team environment and independently, prioritize and execute multiple tasks by the set deadlines
* strong organizational and time management skills
* experience working with ORNL systems such as the RHACS, SAMS, HMMIS and the Facility Service Center
* initiative towards improving laboratory safety and work planning, proper disposal of waste, and inventory maintenance
* completion of trainings:
	+ Fire Extinguisher Training for PSD personnel (completed 03/18/2022)
	+ ORNL PAPR Hood Training (01/11/2022)
	+ LSM Dynamic Learning Experience Workshop and Pilot course (09/20/2021-09/22/2021)
	+ Radiological Worker II Initial Training (completed 09/01/2021)
	+ CPR/AED/First Aid Training (completed 23/03/2021)
* knowledge and skills for independent work in the laboratory, as well as the skills to work with analytical methods in organic and inorganic chemistry (UPLC/MS, IS,1H NMR, 13C NMR spectroscopy, CombiFlash Flash Chromatography System, TICA, FTIR, ICP-OES, EasyViewer 100 etc.)
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| Computer skills | * competent in Microsoft Office programs (Microsoft Office, Microsoft Excel, Microsoft PowerPoint), ChemDraw, MestreNova
* digital manipulation and computer graphics skills (AdobePhotoshop, Lightroom)
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| Other skills | * pianist, academic singing – graduate of Ogre Music School, Latvia (professionally oriented education program 20V21201, Piano play (1999-2009))
* sewing, pattern making – graduate of Burda School, Latvia (professionally oriented education program 20P 542 02, Pattern designing and modelling of women’s clothing (2017-2018))
* photography, graphic art, design
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| ADDITIONAL INFORMATION |  |

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| Publications in preparationPublications | **6.** Luu, N. TH; Stamberga, D; Chen, T.; Ivanov, A.S.; Popovs, I.; Kaveevivitchai, W. Multi‐Electron‐Acceptor Organic Molecule as High‐Performance Anode Material for Li‐Ion Batteries. **5.** Bessen, N.; Stamberga, D.; Momen, Md A.; Bryantsev, V. S.; Moyer, B. A.Stability of Alkyl Guanidines in Alkaline Methanolic Media.**4.** Stamberga, D.; Custelcean, R.; Thiele, N.; Bryantsev, V. Direct Air Capture of CO2 with Aqueous Amino Acids and Crystalline Methylglyoxal-bis(iminoguanidine) (MGBIG): Thermodynamics, Kinetics, and Mechanistic Study. **3.** Stamberga, D.; Custelcean, R.; Tsouris, C. Intensified Direct Air Capture Process with a Phase-Changing Bis-Iminoguanidinium Sarcosinate. **2.** Nawaz, K.; Stamberga, D.; Custelcean, R.; Tsouris, C. Design of an Air-Liquid Contactor for Direct Air Capture with Aqueous Amino Acids.**1**. Bessen, N. P.; Ivanov, A. S.; Stamberga, D.; Williams, N. J., Bryantsev, V. S.; Moyer, B. A. A Lipophilic Guanidine with Enhanced Stability for Use in Cesium Separation from Legacy High-Level Nuclear Waste. **5.** Chapleski Jr., R. C.; Chowdhury, A. U.; Wanhala, A. K.; Stamberga, D.; Jansone-Popova, S.; Sacci, R. L.; Harry M. M. III; Stack, A. G.; Bocharova, V.; Doughty, B.; Bryantsev, V. S. Improving Rare-Earth Mineral Separation with Insights from Molecular Recognition: Functionalized Hydroxamic Acid Adsorption onto Bastnäsite and Calcite. *Langmuir* ***2022***, *38*, 5439–5453.**4.** Stamberga, D.; Thiele, N.; Custelcean, R. Synergistic Direct Air Capture of CO2 with Aqueous Guanidine/Amino Acid Solvents. *MRS Adv.* **2022**.**3.** Li, P.; Damron, J. T.; Bryantsev, V. S.; Johnson, K. R.; Stamberga, D.; Mahurin, S. M.; Popovs, I.; Jansone-Popova, S. Guanidinium-Based Ionic Covalent-Organic Nanosheets for Sequestration of Cr (VI) and As (V) Oxoanions in Water. *ACS Appl. Nano Mater.* **2021**, *4*, 13319-13328.**2.** Stamberga, D.; Healy, M. R.; Albisser, C.; Ivanov, A.; Lyon, K.; Foster, F.; Popovs, I. Moyer, B. A.; Jansone-Popova, S. Structure Activity Relationship Approach Towards Lanthanide Separation using Diglycolamides. *Inorg. Chem.* **2020**, *59,* 17620-17630. **1.** Suta, K.; Stamberga, D., Solops, A. Small Nitrogen Heterocycles Containing 1,2,3-Triazoles in the Side Chain. *Science and Applied Chemistry*, **2015**, ISSN 1407-7353. |
|  Technical ReportConferences and presentations | **1.** Bessen, N.; Stamberga, D.; Moyer, B. A*. Synthesis and Purity Specifications for N,N'-Dicyclohexyl-N"-(10-nonadecyl)guanidinium Chloride for Use in Next Generation Caustic-Side Solvent Extraction*; ORNL/TM-2022/2443; Oak Ridge National Laboratory: Oak Ridge, TN, 2022. (*In review*) **24.** Jang, G. G.; Stamberga, D.; Custelcean, R.; Tsouris, C. Microwave Regeneration of CO2 Solid Sorbent for Energy-Efficient Direct Air Capture. 2022 AICHE annual Meeting, Phoenix, AZ, November 13-18, **2022**.**23.** Kasturi, A.; Yiacoumi, S.; Stamberga, D.; Custelcean, R.; Tsouris, C. Sorbent Regeneration Energy Analysis of Phase-Changing Guanidine-based Ligands Used for CO₂ Direct-Air Capture. 2022 AICHE annual Meeting, Phoenix, AZ, November 13-18, **2022**.**22.**  Custelcean, R.; Stamberga, D.; Tsouris, C.; Jang, G. G.; An, K.; Nawaz, K.; Kasturi, A.; Iglesias, B. *Integrated Process for Direct Air Capture of CO2 and Electrochemical Conversion to Ethanol*, invited poster presentation, *2022 Carbon Management Project Review Meeting*, Pittsburgh, PA, August 15-19, **2022**.**21.** Stamberga, D.; Custelcean, R. Intensified Direct Air Capture Process Combining Aqueous Bis-iminoguanidine (BIG) and Amino Acid. ACS Spring 2022, San Diego, CA, March 20-24, **2022**. **20.** Bessen, N.; Stamberga, D.; Moyer, Bruce A. Development of More Hydrolytically Stable Alkyl Guanidines. ACS Fall 2021, Atlanta, GA, August 22-26, **2021**. **19.** Jansone-Popova, S.; Healy, M. R.; Karslyan Y.; Stamberga, D.; Ivanov A. S.; Bryantsev V. S.; Sloop, F. V., Jr.; Popovs, I.; Delmau L.; Moyer, B. A.; Paulenova, A. Actinide and Lanthanide Separation Facilitated by Preorganization of Multidentate Ligands. *Separation Breakthroughs for Commodity and Specialty Chemicals, Environmental Science and Analytical Chemistry*, Galveston, TX, January 26-31, **2020**. **18.** Fujimoto, M.; Flore, R.; Lyon, K.; Greenhalgh, M.; Healy, M.; Jansone-Popova, S.; Stamberga, D.; Foster, M. Hydrodynamic Studies Involving Modified Diglycolamides for Rare Earth Separation. *CMI Annual Meeting* *2019*, Idaho Falls, ID, September 9-11, **2019**.**17.** Flore, R.; Lyon, K.; Greenhalgh, M.; Fujimoto, M.; Cui, H.; O’Kelley, B.; Jansone-Popova, S.; Stamberga, D. *Rare Earth Separation Utilizing Impregnated Diglycolamide (DGA) Ligands on Polystyrene Divinyl Benzene Substrates.*  *CMI Annual Meeting* *2019*, Idaho Falls, ID, September 9-11, **2019**.**16.** Stamberga, D.; Albisser, C. A.; Healy, M. R.; Lyon, K.; Popovs, I.; Jansone-Popova, S. “Separation of Rare Earth Elements using Novel Diglycolamide Ligands.” *258th ACS National Meeting & Exposition*, San Diego, CA, August 25-29, **2019**. *Co-chair* *of Lanthanide & Actinide Chemistry Session*.**15.** Jansone-Popova, S.; Healy, M. R.; Karslyan, Y.; Stamberga, D.; Bryantsev, V. S.; Sloop, F. V.; Popovs, I.; Delmau, L.; Moyer, B. A. “Preorganization and Steric Effect of Multidentate Ligands for An and Ln Separation.” *43rd Actinide Separations Conference,* Kingsport, TN, May 20-23, **2019**.**14.** Healy, M. R.;Stamberga, D.; Albisser, C. A.; Moyer, B. A.; Popovs, I.; Lyon, K.; Jansone-Popova, S. “Advancement of Lanthanide Extraction Through Preorganized Ligand Design and Coordination Site Studies.” *257th ACS National Meeting & Exposition*, Orlando, Fl, March 31 – April 4, **2019**.**13.** Stamberga, D.; Albisser, C. A.; Healy, M. R.; Popovs, I.; Jansone-Popova, S. “Synthesis of Rigid and Flexible Extractants with High Affinity for Specific Ln(III) Clusters.” *CMI Winter Meeting*, Golden, CO, February 4-5, **2019**.**12.** Healy, M. R.;Stamberga, D.; Albisser, C. A.; Moyer, B. A.; Popovs, I.; Lyon, K.; Jansone-Popova, S. “Lanthanide Separation Through Effective Ligand Design: a Study of Alkyl Group Influences in DGAs at the Metal Coordination Site and the Liquid-liquid Interface.” *CMI Winter Meeting*, Golden, CO, February 4-5, **2019**.**11.** Stamberga, D.; Albisser, C. A.; Healy, M. R.; Popovs, I.; Jansone-Popova, S. “Synthesis of Rigid and Flexible Extractants with High Affinity for Specific Ln(III) Clusters.” *20th Symposium on Separation Science & Technology*, Gatlinburg, TN, October 21-24, **2018**.**10.** Healy, M. R.;Albisser, C. A.; Durain, J.; Stamberga, D.; Ivanov, A.; Bryantsev, V. S.; Moyer, B. A.; Popovs, I.; Jansone-Popova, S. “Strategic Study on Lanthanide Separation Through Effective Ligand Design” *20th Symposium on Separation Science & Technology*, Gatlinburg, TN, October 21-24, **2018**.**9.** Healy, M. R.; Albisser, C. A.; Durain, J.; Stamberga, D.; Moyer, B. A.; Bryantsev, V. S.; Ivanov, A.; Popovs, I.; Jansone-Popova, S. “Ligand Design and Testing for Selective Extraction of Lanthanides(III) –Current Progress and New Directions.” *CMI Annual Meeting* *2018*, Ames, IA, September 5-6, **2018**.**8.** Suta, K.; Stamberga, D.; Solops, A.; Domracheva, I.; Shestakova, I.; Turks, M. “Search for Selective MMP-2 Inhibitors in Series of Novel Triazolylmethyl Aziridines and Azetidines.” 20th European Symposium on Organic Chemistry, Cologne, Germany, Jul 2 - 6, **2017**.**7.** Suta, K.; Stamberga, D.; Solops, A.; Domracheva, I.; Shestakova, I.; Turks, M. “Synthesis of New Aziridine and Azetidine Derivatives as Potential MMP-2 Inhibitors.” *Balticum Organicum Syntheticum*, Riga, Latvia, July 3-6,**2016**.**6.** Suta, K., Stamberga, D., Solops, A., Kumpiņš, V., Domracheva, I., Turks, M. “Synthesis and MMP Inhibition Studies of Novel Triazolylmethyl Aziridines and Azetidines.” *17th Tetrahedron Symposium*, Sitges, Spain, Jun 28 - Jul 1, **2016**.**5.** Suta, K.; Stamberga, D.; Solops, A.; Domracheva, I.; Shestakova, I.; Turks, M. “Synthesis and Biological Activity of Triazolylmethylaziridines and Azetidines.” *74th LU Scientific Conference*, Riga, Latvia, February 5-24,**2016**. *Conference co-chair*.**4.** Suta, K.; Stamberga, D.; Solops, A.; Domracheva, I.; Shestakova, I.; Turks, M. “Search for New MMP-2 Inhibitors Among Small Nitrogen Heterocycles Containing Disubstituted 1,2,3-triazole in the Side Chain.” Riga Technical University *56th International Scientific Conference*, Riga, Latvia, October 14-17,**2015***.***3.** Suta, K.; Stamberga, D.; Solops, A.; A., Domracheva, I., Shestakova, I.; Stepanovs, D.; Turks, M. “Synthesis and MMP-2 Inhibition Studies of Novel Aziridine and Azetidine Derivatives.” *Drug Discovery Conference*, Riga, Latvia, August 27-29, **2015**.**2.** Suta, K.; Stamberga, D.; Solops, A..; A., Domracheva, I., Shestakova, I.; Turks, M. “Small Nitrogen Heterocycles Containing 1,2,3-Triazoles in the Side Chain.” *Paul Walden 9th Symposium on Organic Chemistry*, Riga, Latvia, May 21-22, **2015**.**1.** Suta, K.; Stamberga, D.; Solops, A.; Domracheva, I.; Shestakova, I.; Turks, M. “Search for New MMP-2 Inhibitors Among Small Nitrogen Heterocycles Containing Disubstituted 1,2,3-triazole in the Side Chain.” *56th RTU Student Scientific and Technical Conference*, Riga, Latvia, April 23,**2015**. |
| Honours and awards | * American Latvian Association (ALA) Scholarship (2012-2015)
* Latvian Prime Minister’s Valdis Dombrovskis Scholarship for Outstanding Engineering Science Students (2012)
 |
| Memberships | * American Chemical Society (2019 – 2020; 2021-present)
* Mixed choir of University of Latvia “Dziesmuvara” association “Dziesmuvara” (member of the board of directors (2014 – 2018)) (2013 – 2018)
* Mixed choir of University of Latvia “Juventus” (2012 - 2014), association “Juventus”
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