



**Jānis Ruško**

## WORK EXPERIENCE

**09/2018 – CURRENT** Riga, Latvia

**Senior expert in chemical risk assessment, researcher** Institute of Food Safety, Animal Health and Environment "BIOR"

**Main responsibilities and accountabilities.**

**Risk Assessment & Project Management:**

- Coordination and implementation of risk manager requests and food safety projects, aligned with national and EU stakeholders.
- Preparation and review of scientific opinions, food risk assessment reports, and analysis of state-level measures.
- Facilitation of national, regional, and international partnerships.
- Development of grant applications and realistic project plans related to food safety campaigns, events, or research activities.

**Communication & Consultations:**

- Communication and consultation with food operators, researchers, regulatory bodies, and national experts on European food law, EFSA guidance, and activities.
- Facilitation of scientific exchange, including the development and dissemination of best practices in food safety and risk assessment methodologies.

**Research & Analysis:**

- Conducting research in food safety risk assessment and analytical chemistry, focusing on non-target mass spectrometry and chemical hazard identification.
- Utilizing Python, R, SQL, KNIME for data analysis, transformation, and pipeline implementation, as well as other tools for non-target mass spectrometry analysis.

**Education & Promotion:**

- Enhancement of organization (BIOR and EFSA) recognition through various communication initiatives and national campaigns.
- Promotion and facilitation of national organizations' participation in EFSA's risk assessment activities, with support in identifying opportunities and methodologies.

**Business or Sector** Professional, scientific and technical activities |

**Department** Unit of Risk Assessment and Epidemiology

**07/2022 – CURRENT** Parma, Italy

**Management Board alternate member** European Food Safety Authority

Serving as an alternate member to the country representative in the European Food Safety Authority (EFSA) Management Board, prepared to engage in governance and decision-making processes as required, and maintaining an active understanding of board activities and decisions.

**Business or Sector** Administrative and support service activities

**05/2021 – 09/2022** Riga, Latvia

**European Food Safety Authority Focal point representative** Institute of Food Safety, Animal Health and Environment "BIOR"

**Main Responsibilities and Accountabilities.**

**Coordination & Scientific Cooperation:** Acted as a vital link between European Food Safety Authority (EFSA) and Latvia, coordinating scientific cooperation, risk assessment, and knowledge sharing with EU Member States, and implementing EFSA tools and systems.

**Communication & Engagement:** Ensured regular updates on organization profiles, supported national experts in EFSA activities, and enhanced EFSA's recognition through various communication initiatives, including information exchange and participation in related food safety campaigns.

**Business or Sector** Administrative and support service activities

**12/2020 – 12/2021** Riga, Latvia

**Researcher** University of Latvia

**Project Description:** Engaged in a research project focusing on the development of methods for discriminating Latvian mono-floral honey varieties using nuclear magnetic resonance, chromatography coupled with mass spectrometry, isotope ratio mass spectrometry, and chemometric methods.

**Main Responsibilities and Accountabilities.**

**Method Development & Analysis:**

- Developed liquid chromatography-high resolution mass spectrometry methods for non-target screening.
- Identified characteristic biomarkers essential for the discrimination of honey varieties.
- Engaged in intricate data analysis and investigation using chemometrics to enhance the project's outcomes.

**Research Communication:** Authored original drafts of scientific papers and actively participated in the review and editing process to ensure high-quality publications.

**Business or Sector** Professional, scientific and technical activities | **Department** Faculty of Chemistry

**09/2017 – 09/2018** Naples, Italy

**EU-FORA fellow, visiting researcher** European Food Safety Authority

**Project Description:** Engaged as a visiting researcher with a focus on bio-analytical method development for the determination of organophosphate pesticide contamination in water and food. This position encompassed hands-on research and participation in training modules at leading EU risk assessment institutions (EFSA, AGES, BfR, EFET).

**Main Responsibilities and Accountabilities.**

**Method Development & Research:** Developed innovative biosensor based analytical methods to detect and assess organophosphate pesticide contamination in various food and environmental matrices.

**Training & Professional Development:** Attended and actively participated in specialized training modules in areas such as:

- Animal health and welfare, GMOs, regulated products, environmental, chemical, and microbiological risk assessment.
- Risk reporting and crisis response.
- Emerging risks, nanotechnologies, risk ranking, AOPs, NAMs.

**Business or Sector** Professional, scientific and technical activities

**06/2015 – 08/2017** Riga, Latvia

**Senior expert, scientific assistant** Institute of Food Safety, Animal Health and Environment "BIOR"

**Position Description:** Served as a laboratory staff member (analytical chemist) with multifaceted responsibilities. The role encompassed method development, quality control, routine analysis, equipment maintenance, and participation in various scientific projects.

**Main Responsibilities and Accountabilities.**

**Method Development & Quality Control:**

- Developed, optimized, and implemented analytical methods for GC and LC-MS.
- Engaged in method validation and quality control procedures to maintain high standards.

**Sample Analysis & Monitoring:**

- Conducted routine sample analysis across various food and environmental matrices.
- Participated in environmental monitoring program sample analysis.

**Equipment Maintenance & Projects:**

- Responsible for the maintenance of chromatographic (GC/LC) and mass spectrometry (HRMS and QqQ systems) equipment.
- Contributed to various scientific research projects, enhancing laboratory innovation and excellence.

**Business or Sector** Professional, scientific and technical activities

## EDUCATION AND TRAINING

### 2021 - CURRENT

- **Training on Chemical, Microbial, Environmental risk assessment, Evidence management** BTSF Academy

Website <https://btsfacademy.eu/training/>

### 2017 - 2021 Riga, Latvia

- **PhD in Analytical Chemistry** University of Latvia

Dissertation on the development of bio-analytical and mass spectrometry methods for non-target screening of chemical environmental and food contaminants as well as risk assessment.

**Field of study** Natural sciences, mathematics and statistics | **Level in EQF** EQF level 8

### 2015 - 2017 Riga, Latvia

- **MSc in natural sciences (chemistry)** University of Latvia

Thesis on the development of chromatographic - high resolution mass spectrometry methods for the analysis of phenolic (antioxidant) compounds in processed food matrices

**Field of study** Natural sciences, mathematics and statistics | **Level in EQF** EQF level 7

### 2012 - 2015 Riga, Latvia

- **BSc in Natural Sciences (Chemistry)** University of Latvia

Thesis on the synthesis and determination of kinetics of tetrahydroisoquinolines via a one-pot imine cyclization reaction using polyphosphoric acid and further enantiomeric purification.

**Level in EQF** EQF level 6

### 2018 - 2018 Copenhagen, Denmark

- **Training on Risk-Benefit assessment** Technical University of Denmark (DTU)

## LANGUAGE SKILLS

**MOTHER TONGUE(S):** Latvian

**Other language(s):**

### English

**Listening** C2

**Reading** C2

**Writing** C2

**Spoken production** C1

**Spoken interaction** C2

### Russian

**Listening** B1

**Reading** B1

**Writing** A2

**Spoken production** A2

**Spoken interaction** B1

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

## DIGITAL SKILLS

### Digital Skills - Test Results

 Information and data literacy	<b>ADVANCED</b> Level 6 / 6
 Communication and collaboration	<b>ADVANCED</b> Level 6 / 6
 Digital content creation	<b>ADVANCED</b> Level 5 / 6
 Safety	<b>ADVANCED</b> Level 6 / 6

Results from [self-assessment](#) based on [The Digital Competence Framework 2.1](#)

## ADDITIONAL INFORMATION

### Publications

#### Publications

Full list of publications available at Orcid, Google Scholar or Scopus.

Most notable publications:

- Perkons, I., [Rusko, J.](#), Zacs, D., & Bartkevics, V. (2020). Rapid determination of pharmaceuticals in wastewater by direct infusion HRMS using target and suspect screening analysis. *Science of The Total Environment*, 755, 142688.
- [Rusko, J.](#), Perkons, I., Rasinger, J. D., & Bartkevics, V. (2020). Non-target and suspected-target screening for potentially hazardous chemicals in food contact materials: investigation of paper straws. *Food Additives & Contaminants: Part A*, 1-16.
- Cetrangolo, G. P., [Rusko, J.](#), Gori, C., Carullo, P., Manco, G., Chino, M., & Febbraio, F. (2020). Highly Sensitive Detection of Chemically Modified Thio-Organophosphates by an Enzymatic Biosensing Device: An Automated Robotic Approach. *Sensors*, 20(5), 1365.
- Reinholds, I., [Rusko, J.](#), Pugajeva, I., Berzina, Z., Jansons, M., Kirilina-Gutmane, O., ... & Bartkevics, V. (2020). The Occurrence and Dietary Exposure Assessment of Mycotoxins, Biogenic Amines, and Heavy Metals in Mould-Ripened Blue Cheeses. *Foods*, 9(1), 93.
- [Rusko, J.](#), Pugajeva, I., Perkons, I., Reinholds, I., Bartkiene, E., & Bartkevics, V. (2019). Development of a Rapid Method for the Determination of Phenolic Antioxidants in Dark Chocolate Using Ultra Performance Liquid Chromatography Coupled to Orbitrap Mass Spectrometry. *Journal of chromatographic science*, 57(5), 434-442.
- [Janis Rusko](#), Mārtiņš Jansons, Iveta Pugajeva, Dzintars Zacs, Vadims Bartkevics: Development and optimization of confirmatory liquid chromatography—Orbitrap mass spectrometry method for the determination of 17 anticoccidials in poultry and eggs. *Journal of Pharmaceutical and Biomedical Analysis* 11/2018; DOI:10.1016/j.jpba.2018.10.056
- [Janis Rusko](#), Ferdinando Febbraio: Development of an automated multienzymatic biosensor for risk assessment of pesticide contamination in water and food. *EFSA Journal* 08/2018; 16., DOI:10.2903/j.efsa.2018.e16084

### Driving Licence

Driving Licence: B