# **Kazan Federal University**

#### **Department/division: Laboratory of Chemoinformatics**

The main emphasis of the laboratory is application of chemoinformatics and artificial intelligence in areas of chemistry, especially computational drug design. Research activities of the laboratory focus on three areas: computational technologies to assist target synthesis of desired compound, development of novel performant computational drug design techniques taking into account chemical complexity, and computational material design for petroleum and polymer industry. Recently, novel technology for structure-activity relationship building based on multi-instance learning have been proposed.

Position title: Laboratory Specialist in Laboratory of Chemoinformatics

**Position purpose**: To help to develop multi-instance models and study their performance and interpretability.

## **Duties and responsibilities:**

- Preparing datasets to build multi-instance models
- Building multi-instance models on a local cluster
- Interpreting obtained models
- Investigating model performance depending on tuning parameters
- Presenting results in seminar

### Qualifications

#### Field/s of study:

- Chemistry

Level of study: doctoral

#### Professional competences:

- Chemistry
- Chemoinformatics
- Machine learning

## Key competences/Language skills:

- English A2-B2 Elementary-Upper intermediate (Required)
- Russian A2-B2 Elementary-Upper intermediate (Required)

## Key competences/Computer skills:

- Python, PyTorch

#### Key competences/Other:

- Communication
- Critical and analytical thinking
- Planning and organizing
- Creative thinking
- Teamwork

- Intercultural perception
- Initiative
- Reliability

## How to apply

Please send CV and cover letter (in English) to Dr. Pavel Polishchuk, <u>pavlo.polishchuk@upol.cz</u>, by 23/04/2021 at the latest.

## **Facts**

Economic sector: Tertiary education

Size: staff 2 001 to 5 000

Working language/s: Russian, English

Type of work placement: Traineeship

City/Country: Kazan/Russia
Earliest start date: 01/05/2021
Latest start date: 17/05/2021
Duration: 2,5 – 3 months

Working hours: 35 hours/week

Remuneration:

Financial contribution: 0 EUR/month

Contribution in kind: none

# **Application**

Required application documents: CV, cover letter (in English) to be sent to Dr. Pavel

Polishchuk, pavlo.polishchuk@upol.cz

Application deadline: 23/04/2021