

Postdoctoral Researcher (Sedimentology/Stratigraphy)

The Geoscience Department of the School of Mining and Geosciences is seeking outstanding researchers to fill up to 2 full-time research positions at post-doctoral (PhD holder) level. **PhD holder must have at least two Q1 publications as a lead author**. The fields of research are broadly defined across the range of geological sciences related to exploration and exploitation of petroleum, uranium, and energy minerals as well as to utilization of sedimentary basins for geoscience solutions related to renewable energy (geothermal, solar, wind) and/or carbon storage. The overall research theme is “Sedimentary Models for Energy Transition / SMET”. The main aim is to create innovative solutions which will contribute to the nation's goals to continue being globally competitive energy producer and through various decarbonization initiatives to become a global leader in climate change mitigation. Research topics include:

- Geothermal Energy Production, Solar and Wind Energy Storage, and Carbon Storage and Sequestration (CSS) Potential in Sedimentary Basins
- Organic Rich Strata: Origin and Characterization with Implications to Petroleum Exploration, Unconventional Resource Evaluation, and Carbon Storage Potential.
- Stratigraphy and Sedimentology of Uranium Bearing Formations in Chu-Sarysu Basin.
- Advanced Petroleum Reservoir Studies with Focus on Reducing the Production Cost and Carbon Footprint through improved modeling, optimized recovery strategies, and EOR.
- Outcrop Analogues for Subsurface Mapping, Modeling, and Field Development.

All projects are funded by public grants, industry partners, and/or industry consortiums and thus are subject to semi-annual and annual reviews.

We seek ambitious candidates who are able independently to plan and conduct research, acquire, analyze, and integrate scientific literature and a range of various data, and are motivated to develop novel concepts and solutions. In addition to academic background, relevant industry experience and ability to attract industry partners is an advantage. Willingness to travel and conduct field research are essential.

Selected candidates are expected to utilize a range of state-of-the-art tools available at NU, actively participate in research team meetings and activities, and to publish research results at the international level (i.e. Q1 journals). They will have opportunities to co-supervise BSc and MSc projects and get involved in teaching activities.

Salary is internationally competitive. The employment contracts are for 2-3 years, but subject to 3-6 month probation period and semi-annual and annual performance and budget reviews. Working language is English. Knowledge of Russian and/or Kazakh, familiarity with Kazakhstan sedimentary basins, and/or government geological data storages and sample repositories, and ArcGIS or Petrel is a strong advantage. However, the primary criteria in selecting the candidates will be scientific merit and the way in which they would contribute to the future development of the department and to the potential benefits to society.

The successful candidates will have a PhD degree in geosciences (preferably sedimentology) from an internationally recognized institution. An applicant is expected to send a motivation cover letter, CV, a list of publications (PhD holders only), and provide names of 3 professionals from relevant academic or industry fields from whom reference letters can be requested. All documents should be sent electronically directly to Dr. Milovan Fustic milovan.fustic@nu.edu.kz. The positions remain open until filled; evaluation of applications will begin on January 31, 2021. Only selected candidates will be contacted. We encourage applicants with current commitments (i.e. expected completion of PhD in 2021), who are interested in joining us later, to communicate with us.