Young Scientist collaborator sheet
for NKS R and B project proposal involvement

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Nordic nuclear safety research

The form should be signed and sent by e-mail to nks@nks.org for publication on www.nks.org

1. Personal information

Name			
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Please note that this form with any information you enter in it will be made public on the NKS web site. For inquiries contact us at nks@nks.org. If you later no longer wish to have your file published on the NKS website, it is your responsibility to clearly notify NKS of this by sending an email to nks@nks.org.

2. Describe your relevant background, experiences, skills and expertises. What can you bring to a NKS project?

Please give a short and general description here (max 30 lines)

I currently work as a Chemist at Technical University of Denmark (DTU) focusing on the determination of radionuclides (actinides, Cs-137 and Sr-90) in nuclear power plant and environmental samples. Previously, I worked as the Team Leader for the Engineered Barrier System Development Department at the Czech Radioactive Waste Repository Authority (SÚRAO). My responsibility was to provide scientific support and coordinate Research and Development (R&D) projects. These projects focused on metallic canisters and bentonite barriers for the future implementation of deep geological disposal of spent nuclear fuel and intermediate-level radioactive waste. I was actively involved in international projects, including HotBent, COST, and the EURAD projects CONCORD and ACED. Concurrently, I worked as a Researcher at the Institute of Laboratory Research on Geomaterials in the Faculty of Natural Sciences, Comenius University in Bratislava. I graduated with a Ph.D. in Nuclear Chemistry in 2021. My research investigated various aspects of the distribution of potentially dangerous elements in the environment and the transformation of iron oxyhydroxides and oxides (corrosion products of metallic canisters). My research experience with radionuclides was also gained during internships at KIT (Karlsruhe Institute of Technology), and the University of Helsinki, focused on radiochemistry. The core focus of these studies was the separation, immobilization/sorption, and determination of radionuclides in solids and liquids, specifically from radioactive wastes or possible leachates from deep geological disposal. I am familiar with using ICP-MS, LSC, SEM-EDS, XRD.

3. Describe your specific interests and wishes regarding collaboration. How would you like to be involved in a NKS project? Which types of projects could have your interest?

Please give a short and general description here (max 30 lines)

I would particularly like to colaborate in developing of the novel separation methods and deepen the knowledge with radioanalytical equipments as well as ICP-MS.