his PhD studies at KAIST, Jo did a PostDoc at the Institute for Nuclear Waste Disposal (Institut für Nukleare Entsorgung, INE) of the Karlsruhe Institute of Technology (KIT), Germany, from 2020 to 2022. Research at KIT-INE was mainly focusing on a better description of Nb(V) aquatic chemistry in cementitious environments. Niobium-94 is an activation product potentially present as part of nuclear waste, and a better understanding of Nb aqueous speciation and retention processes in cementitious environments are needed to provide a significantly improved description of Nb(V) mobility in an applied repository context.

Yongheum Jo

After his PostDoc at KIT-INE, Jo worked as a senior researcher at Korea Atomic Energy Research Institute (KAERI) from 2022 to 2023. Starting in 2023, Jo assumed the role of an assistant professor in the Department of Nuclear Engineering at Hanyang University in Korea. His current work focuses on Nb solids solubility in alkaline aqueous solution in the presence of organic materials. The objective of this topic is to establish a comprehensive chemical thermodynamic description of Nb solids solubility in the presence of organic compounds and Nb-organic complexation. In addition, he is developing a chemical model that depicts the chemical interaction between organics and cementitious materials, covering dissolution and precipitation phenomena. Building on his previous work, he is expanding his investigation to explore the ternary M-AnO2-CO3 system in the context of neptunium(VI) to derive chemical equilibrium data. His research group will continue to explore the chemical thermodynamics to unravel the chemical processes of radionuclides in various environments.

Yongheum Jo has an impressive set of excellent scientific knowledge and expertise. This is covering a broad field in the context of actinide and radionuclide chemistry relevant in fundamental research and to assess scenarios in nuclear waste disposal and the back-end of nuclear fuel cycle. Studies on solubility phenomena and the related chemical speciation play a key role in his research profile.

More details at https://iupac.org/what-we-do/awards/franzosini-award/

ISC's Unlocking Science series wins Digital Communications Award

The multimedia series Unlocking Science, produced in partnership with BBC StoryWorks, the International Science Council (ISC) Members and other partners, is voted the best in the 'Video Series' category at the prestigious Digital Communications Awards (DCA).

The Unlocking Science multimedia hub, which uncovers innovative global stories behind the science of sustainability, was lauded by the DCA jury for its compelling and innovative storytelling. These stories feature communities engaging with science and technical innovation to deliver transformation. The series covers researchers out in the world working on practical solutions or shaping our understanding of the problem. One of the most popular films recounts one woman's quest to save Malawi's crops and rethink the future of farming. In another film, a team of researchers weed out discrimination for an inclusive AI world. The stories represent a wide array of science disciplines and take audiences from the outback of Australia to the forests of the Amazon.

https://council.science/current/news/dca-award/

Richard Hartshorn elected CODATA Vice President

Held on 27-28 October 2023, in Salzburg and online, the 2023 CODATA General Assembly elected a strong and diverse Executive Committee and approved eight Task Groups and one Working Group. The full summary of the General Assembly, including presentations, results of voting and the recordings can be consulted on codata.org.

For the first time in CODATA's 57-year history, CODATA has elected a female president, and the overall gender balance is 7-8 (female-male) for the elected members is the best ever. This is also the highest number of Officers/ExComm members nominated by International Scientific Unions in at least the last ten years, which shows a confidence in CODATA mission to engage with data issues from a range of scientific fields. Coming from IUPAC, former Secretary General Richard Hartshorn has been serving as a member of the Executive Committee since 2018 and is now elected