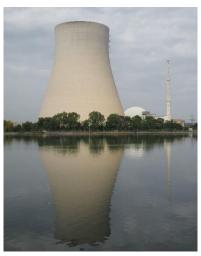
NUCLEARWATERS: Putting Water at the Centre of Nuclear Energy History

Newsletter December 2021

The ERC project <u>NUCLEARWATERS</u>, based at KTH Royal Institute of Technology in Stockholm, explores the connections between nuclear energy and water in historical perspective. The goal is to rewrite the global history of nuclear energy by putting water at the centre of the analysis. Led by <u>Per Högselius</u>, the project comprises seven senior and junior researchers, who collectively examine the "wet" history of nuclear energy from a range of thematic and geographical angles.

The project is now starting to generate concrete outcomes in terms of publications. Have a look at Siegfried Evens' study of how <u>nuclear safety codes and regulations built on pre-nuclear thermal-hydraulic experiences</u> – probably the first time ever that nuclear energy features in the journal *Water History* – and Anna Storm's in-depth analysis of <u>"atomic fish" and nuclear nature imaginaries</u>. The seven project members also co-authored a methodologically oriented piece, based on the project experience, on <u>how history of technology should be written</u>. More publications are on the way!

Our multilingual team has also been very active in authoring op-eds and other texts aimed for the general public. If you can read Swedish or Dutch, check out our contributions to the debate about the Chernobyl TV series, our comparative analysis of Swedish, German, Russian and Finnish nuclear energy debates and our prediction that liberalized electricity markets are forever incompatible with new investments in water-cooled nuclear power plants. Or if you can read German or Estonian, consider Achim Klüppelberg's reflections on the 35th anniversary of the Chernobyl disaster and Kati Lindström's thoughts on the still ongoing Fukushima disaster in the context of the COVID-19 pandemic and the Summer Olympics.



Cooling tower at the Isar NPP in Germany, photo by Per Högselius

How to go about researching the "wet" history of nuclear energy in practice? Some of our hard empirical work — with archival visits to the United States, Russia, Ukraine, Lithuania, Estonia, Belgium, France, Germany, Austria, Liechtenstein, Switzerland and Sweden, plus numerous site visits — found its way into our project blog. Read about Achim Klüppelberg's research trips to Ukraine and Lithuania, Per Högselius' exploration of Germany's and Lithuania, Per Högselius' exploration of Germany's and Lithuania, Per Högselius' exploration of Germany's and Lithuania, Per Högselius' exploration of Germany's and Lithuania, Per Högselius' exploration of Germany's and Lithuania, Per Högselius' exploration of Germany's and Lithuania, Per Högselius' exploration of Germany's and Lithuania, Per Högselius' exploration of Germany's and Lithuania, Per Högselius' exploration of Germany's and Lithuania, Per Högselius' exploration of Germany's and Lithuania, Per Högselius' exploration of Germany's and Lithuania, Per Högselius' exploration of <a href="Germany's and Achim Klüppelberg's search for Estonia's hidden atomic past and how the nuclear facilities along the Rhône haunted Siegfried Evens on his holiday!

Upcoming stories will feature Alicia Gutting's recent archival odyssey to Switzerland Germany, and Liechtenstein (yes, tiny Liechtenstein does have a nuclear history – follow Alicia's research to find out in what ways!) and Siegfried Evens' trip to the United States, where he collected valuable source material at MIT, the Linda Hall Library, the Westinghouse Archives and the Library of Congress. In D.C. Siegfried was also



State Archive of Liechtenstein, photo by Alicia Gutting

able to join this year's <u>ANS Winter Meeting</u>, discussing nuclear energy with engineers, experts and representatives of the North American nuclear industry. Alicia likewise combined her archival research trip with attending a key conference, presenting her work at the <u>Interdisciplinary Research Symposium on the Safety of Nuclear Waste Disposal Practices</u> (SafeND) in Berlin.



Library of Congress, photo by Siegfried Evens

Other recent conference highlights include a double-session organized by Alicia and Per at the Annual Conference of the Royal Geographical Society and the Institute of British Geographers (RGS-IBG) in London. Targeting the "Geographies of Nuclear Power", the session brought together 12 presentations and 14 scholars from a range of countries and academic fields. Alicia also organised the interdisciplinary stream "Nuclear Narratives" for the STREAMS conference at KTH together with Hannah Klaubert from Stockholm University and GCSE Gießen. The stream had four different panels: 1. Nuclear Narratives in Social and Historical Research; 2. Nuclear Narratives in Cultural Research; 3. Nuclear Politics of Care and Heritage; 4. Nuclear Risk Perception and Uncertainty.

Despite the difficulties posed by the ongoing Covid-19-pandemic, the three PhD students in the project – Alicia, Siegfried and Achim – have

now successfully passed their midterm evaluations, a crucial step in the Swedish PhD system. For these evaluations we organized three midterm seminars, taking the opportunity to invite Itay Fischhendler, Aditi Verma and Stefan Guth as discussants to assess the students' progress.

At the same time, NUCLEARWATERS has taken interest in what PhD students elsewhere, in the broad field of nuclear humanities and social sciences, are up to. For this purpose we invited Hannah Klaubert, Louis Fagon, and Aleksandra Brylska to present their PhD projects in a miniseries of online seminars.

Louis, who is based at EHESS in Paris and who is now finalizing his PhD thesis about the Nuclear Rhône, further joined us as a guest for two weeks. Another guest has been <u>Andrei Stsiapanau</u>,

who stayed with us for an extended period of time. Most recently, starting 1 December, **Melina Antonia Buns** joined us as a visiting post-doc researcher, based on a collaboration with <u>The Greenhouse</u> at the University of Stavanger. Melina was awarded a major grant from the Norwegian Research Council for her project Nuclear Nordics, which entails a near two-year stay at KTH.

Through a unique cooperation between two KTH-based ERC projects – NUCLEARWATERS and GRETPOL (Greening the Poles, led by Peder Roberts) – we were able to employ Russian nuclear energy historian Roman Khandozhko for a period of eighteen months. Roman has now left Sweden for a new position in Russia, but watch out for his forthcoming publication on the Crimean nuclear power plant – one of many NPPs worldwide that started to be built but were never completed.

Upcoming events:

Early next year we will launch a series of (hybrid) seminars that will run during the spring. Watch out for the full programme on the project website! Two seminars are already scheduled:

- 26 January at 15.15-17.00 CET: Post-doc researcher Melina Antonia Buns presents her new Nuclear Nordics project. Join us via zoom: https://kth-se.zoom.us/j/62457898307
- 18 February at 10.15-12.00 CET: Greenpeace campaginer Dima Litvinov presents his finds about the "wet" aspects of Krasnokamensk's uranium mines in eastern Siberia. Join us via zoom: https://kth-se.zoom.us/j/62616138902



Display at Hamaoka NPP Japan 2018, photo by Kati Lindström.

the <u>Nuclear-Water Nexus</u> workshop, which will bring together scholars from a range of fields with a common interest in the relations between nuclear and water.

In terms of conference appearances, NUCLEARWATERS will be represented at <u>Teknik- och vetenskapshistoriska dagarna</u> (Uppsala, 16-18 March 2022), the annual conference of the American Society for Environmental History (Eugene, 23-27 March 2022), the <u>Tensions of Europe Conference</u> (Aarhus, 29 June–1 July), the <u>ESEH conference</u> (Bristol, 4–8 July), and several other events.

Finally: don't miss the next issue of *Technology & Culture*, which will feature Per Högselius' new article "Atomic Shocks of the Old: Putting Water at the Center of Nuclear Energy History."

We wish you all a Merry Christmas and a Happy New Year!