

A new purification method eliminates more than 99 percent of several toxic PFAS substances from water, according to a recent study by the Swedish independent, state-owned research institute RISE.

Dec 01, 2020 06:30 UTC

Government study finds: New technology eliminates PFAS from contaminated water

A new purification method eliminates more than 99 percent of several toxic PFAS substances from water, according to a recent study by the Swedish independent, state-owned research institute RISE. The SELPAXT technology has been developed by Chromafora, an innovation company partly owned by Swedish environmental company Ragn-Sells and can be deployed at existing facilities.

PFAS is a large group of industrially produced chemicals, extremely persistent and difficult to eliminate when released into the ecosystem. The substances occur in drinking water and food, posing a threat to human health as scientific research has linked them to hormonal disturbances, fertility problems, and cancer.

– Research clearly indicates that PFAS compounds possess a threat to human health and the environment. We are very happy to report that the RISE research institute has confirmed that Chromafora’s technology removes close to one hundred percent of these substances from water, says Anders Kihl, Head of Research and Development at environmental company Ragn-Sells and Chairman of the Board at Chromafora.

On behalf of the Swedish Defence Sector, the state-owned research institute RISE has evaluated the decontamination efficacy of Chromafora’s SELPAXT technology. The study proved the technology to eliminate eleven of the most common PFAS substances by up to more than 99 percent. Two of the most well-known and widely spread substances, PFOS and PFOA, banned by EU

legislation due to their proven toxicity, were almost completely eliminated.

– PFAS is a growing problem around the world, particularly because the group comprises so many similar substances. Proved to eliminate a broad range of PFAS compounds also beyond the most common, our technology has great potential to purify contaminated water from industrial sites, landfills and in urban waste water, says Johan Seijmer, CEO of Chromafora.

SELPAXT is a container-based system, ready to be fitted onto existing facilities. Using filters and recyclable chemicals to purify waste water, SELPAXT can be adapted to target specific molecules. Removed PFAS contaminants are liquid and easy to destroy in order to remove harmful substances from circulation. The process is insensitive to glycol that occurs for example at airfields and can be adapted to remove other environmental pollutants such as drug residues.

Per- and polyfluoroalkyl substances, PFAS, are a group of industrially produced chemicals consisting of more than 4 700 different identified substances. Due to their water and dirt repellent function, PFAS have been used at large scale in detergents, waterproofing and firefighting foams since the 1950s. It is also used in many consumer goods such as food packaging, electronics and cosmetics. PFAS is mainly stored in the liver and blood of humans. The substances can be transferred to the fetus via the placenta and to infants via breast milk.

For more information, please contact

Johan Seijmer, CEO Chromafora,
+46 73-800 61 63, johan.seijmer@chromafora.com

Anders Kihl, Chairman of the Board Chromafora, Head of Research and
Development Ragn-Sells,
+46 70-927 26 84, anders.kihl@ragnsells.com

Ragn-Sells Media Services,
+46 70-927 24 00, medialinjen@ragnsells.com

Facts: Testbed PFAS

RISE, the Swedish Fortifications Agency, the Swedish Defense Materiel Administration and the Swedish Armed Forces are running the collaboration project "Testbed PFAS". The project aims to evaluate cleaning of PFAS from ground and water and to develop alternative PFAS-free fire extinguishing agents and methods.

As part of the project, RISE evaluates post-treatment methods for purification and remediation of land and water contaminated by PFAS. The SELPAXT method, innovated by Chromafora, proved to eliminate eleven of the most common PFAS substances with a decontamination efficacy by over 99 percent.

Facts: Chromafora

Chomafora offers tailored technologies to handle waste streams, such as industrial waste water and acid mine drainage. The company has two patented technologies: SELPAXT which removes PFAS from water and SELMEXT which separates heavy metals from waste streams and enables recycling and reuse of rare earth elements.

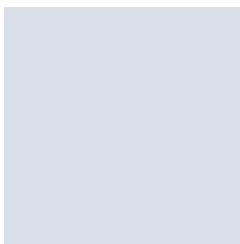
Founded in 2010, Chromafora AB is owned by the founder's Dr Gaston Lavén and Dr Martin Kullberg as well as by the environmental company Ragn-Sells, Zentricity Holding, ALMI and other private investors.

The Ragn-Sells Group is a privately held corporate group, operating companies in four countries.

Since 1966, we've been involved in waste management, environmental services and recycling. We collect, treat and recycle waste and residual products from businesses, organizations and households.

www.ragnsells.com

Contacts



Emma Ranerfors

Press Contact

Press Officer

press@ragnsells.com

+46107232416