

Press release from 28.06.2021

Research and services corporation with the University of Applied Sciences of North-western Switzerland (FHNW).

A new cooperative initiative is intended to substantially reduce quantities of waste in Switzerland, improve the completion of closed-loop material cycles and thus significantly decrease the CO₂ footprint of the Swiss waste and recycling industry.

The Swiss company SELFRAG, based in Kerzers, and the University of Applied Sciences of North-western Switzerland (FHNW) are launching a long-term cooperative research and services programme, with a view to promoting the material exploitation of mineral and metallic wastes, curbing the environmental pollution associated with waste disposal, and therefore significantly reducing CO₂ emissions.

Kerzers, the 28.06.2021 SELFRAG is the world leader in the development of industrial electrodynamic fragmentation systems for the recovery of raw materials from waste. By this method, mixed materials such as electronic wastes, slag or mineral wastes are separated into their individual constituents by the application of high-voltage electric pulses. This environmentally friendly method is employed, *inter alia*, in the cement industry, mining, and in the treatment and recycling of residues from the incineration of household waste. SELFRAG is to further develop the potential of this method in collaboration with the Institute for Biomass and Resource Efficiency at the FHNW.

This planned long-term collaboration is based on joint research projects for the exploitation of mineral and metallic wastes to recover critical raw materials that can be recycled.

"Using our technology, valuable raw materials can be recovered from waste slag for further use. In collaboration with the FHNW, we intend to pursue further development of this environmentfriendly waste recycling, thereby strengthening the closed-loop economy", said Anton Affentranger, Chairman of the Board at SELFRAG.

"We support companies with our expertise in the closed-loop economy, from the development of a technical innovation through to the market-ready stage", explains Petar Mandaliev. "The sustainable goals pursued by SELFRAG coincide with the values of our university".

We would be happy to supply any further information which you may require:

FHNW

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FHNW Institute for Biomass and Resource Efficiency

The FHNW Institute for Biomass and Resource Efficiency undertakes research and development in the fields of alternative propellants and fuels, combustion, and resource efficiency. The Institute forms part of the "SCCER Biosweet" national centre of expertise for energy research and is jointly sponsored by University of Applied Sciences of North-western Switzerland (FHNW) and the Paul Scherrer Institute (PSI).

Further information is available at <u>www.fhnw.ch/ibre</u>

FHNW School of Engineering

On its sites in Brugg-Windisch, Muttenz and Olten, the FHNW School of Engineering trains over 1,800 undergraduates and masters' students in the fields of engineering, IT and optometry. Whether in full-time or part-time study programmes, practical application is a key element of instruction. In collaboration with leading companies both nationally and abroad, the FHNW School of Engineering promotes applied research and development.

Further information is available at www.fhnw.ch/html

SELFRAG AG

At SELFRAG our principle is:

"We only have one planet – we are committed to looking after it".

Using its patented electrodynamic fragmentation technology, SELFRAG has the potential to halve volumes of waste incinerator slag, and to recover and return valuable materials such as metals and minerals to the economic cycle. This method contributes substantially to the reduction of CO_2 emissions in Switzerland and is a key part of developing a functional closed-loop economy.

Further information is available at www.selfrag.com