KEYNOTE
MONTHLY
LECTURES



Food
for
Brain
season #2

EVERY MONTH…

ONE HOUR LECTURE…

ONE SPECIALIST…

ONE HOT TOPIC…

More information is available at

- IWWG website www.iwwg.eu
- IWWG Secretariat info@iwwg.eu

Lecture #5

13:00 CET

May 2023
Wednesday
31th

DOES SOIL REMEDIATION MAKE SENSE FROM WASTE MANAGEMENT PERSPECTIVE?

Prof. Jurate Kumpiene

Waste Science and Technology, Luleå University of Technology, Sweden

The new era of industrialization has prompted the implementation of large-scale infrastructure projects, which involve the redevelopment of land for new establishments. Many of these areas were once industrial sites or are situated in close proximity to them, and have been exposed to various sources of pollution for several decades. To ensure that redeveloped areas are safe for use, the risks posed by pollutants present in the soil must be managed to protect human health and the environment.

Traditionally, soil remediation efforts have still been focused on the removal of contaminated masses for subsequent landfilling, driven by convenience and simplicity. However, the high number and extent of contaminated sites make such actions unsustainable in the long run. In Sweden, this strategy has resulted in polluted soil becoming the largest waste stream to landfills, both for hazardous and non-hazardous waste, contrary to the waste hierarchy endorsed by EU legislation. Landfilling contaminated soil might not serve the purpose either, as a landfill is, by definition, a contaminated site that will require management in the future. Thus, there are several open questions that need to be reflected upon, discussed, and potentially disputed to advance the remediation of contaminated soil from sustainable waste management perspective.



Prof. Jurate Kumpiene
Luleå University of Technology
Sweden

Jurate Kumpiene, Professor in Waste Science and Technology at Luleå University of Technology, Sweden. She has over 20 years of experience in education, research and innovation in the area of waste characterisation and treatment, with particular focus on soil remediation. She has led and implemented multiple national and international projects in cooperation with public sector and industry. Kumpiene is currently a member of the IWWG Board and Associate Editor of journal Detritus. In 2022, Kumpiene's research on soil remediation has been selected by the Royal Swedish Academy of Engineering Sciences to the year's list of top national research projects with the focus on technology in the service of humanity.