

Coal- and bio-based water remediation strategies for underground coal gasification and beyond

www.ucgwaterplus.eu

17 September 2024 On-site or online Free registration

Stakeholder workshop

Invited talks on wastewater remediation and reutilization of coal industry residues.

Presentation of UCGWater+ project findings.

Roundtable discussion with experts in the related fields

Join the meeting in this link

Contact us for further information

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This workshop is brought to you by the UCGWater+ partners





This project is funded by the Research Fund for Coal and Steel under Grant Agreement № 101033964





UCGWater+ workshop 17 September 2024 9:00 — 15:00 CEST Description

Underground coal gasification (UCG) is considered an environmentally and economically viable option toward the exploitation of coal resources in which the EU is relatively rich. The most serious environmental risk of UCG is the contamination of water. So, **UCGWater+** project is dedicated to investigate approaches for UCG water remediation, including exploring innovative solutions that stem from the coal sector itself and make use of the **"turning waste into a resource"** concept of Circular Economy, one of the main pillars of the European Green Deal.

Hence, **UCGWater+** aims to develop a novel family of carbonaceous adsorbents using the UCG contaminants (coal tar products) and residues (chars) as precursors. These adsorbents and electrocoagulation methods will be used for the purification of polluted waters in combination with bioremediation based on constructed wetlands.

Chairpersons: Juan Ignacio Paredes Nachón (<u>paredes@incar.csic.es</u>)

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Outline

Session 1: UCGWater+, decontamination of coal industry wastewaters and beyond. The main findings of the project will be presented and prospective lines of work will be proposed.

Session 2: Invited talks

The treatment and remediation of wastewaters will be addressed from different perspectives.

Session 3: Roundtable discussion

A panel of experts from different fields will debate about the present and future technologies of wastewater remediation and the reuse of coal industrial wastes.



UCGWater+ workshop

17 September 2024

9:00 — 15:00 CEST

Preliminary agenda

9:00 – 9:10 Opening

9:10 – 11:00 Session 1: UCGWater+ key findings

Project overview

Juan Ignacio Paredes (Instituto de Ciencia y Tecnología del Carbono, INCAR-CSIC, Spain)

Polluted waters and residual chars from underground coal gasification Krzysztof Stańczyk (Glowny Instytut Gornictwa, Poland)

Preparation of coal tar products

Enrique Esparza (Bilbaína de Alquitranes, S.A., Spain)

Synthesis of polymers and activated carbons from coal tar products and UCG chars Vanessa Fierro (Institut Jean Lamour, CNRS, France)

Decontamination of UCG waters through coagulation processes Mateusz Szul (Instytut Technologii Paliw i Energii, Poland)

UCG waters bioremediation and combined bioremediation-adsorption approaches Grażyna Płaza (Instytut Ekologii Terenów Uprzemysłowionych, Poland)

11:00 – 11:30 Coffe break

11:30 – 12:30 Session 2: Invited talks

Best available techniques (BAT) conclusions for wastewater management Anna Kwiecińska-Mydlak (FCC Environment, Poland)

A special case of industrial waste water (Coal Tar/Coke Oven Battery) Emilio Sánchez-Cortezón (Nalontech, Spain)

Ecological transition and circular economy: Bordet 1860, an innovative solution for vegetal activated carbon

Charlotte Albarel (Groupe Bordet, France)

Removal of emerging pollutants from water Taher Selmi (CarBioLab-Bordet, France)

12:30 - 13:30 Lunch time

- 13:30 15:00 Session 3: Roundtable discussion
- 15:00 15:15 Final observations and wrap-up