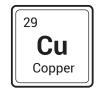
MOST COMMON APPLICATIONS

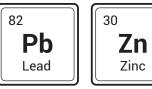
HEAVY METAL REMOVAL







Surface treatment baths pH neutral - basic - acidic



Ground Water Stormwater

SPECIFIC APPLICATIONS



Ground Water Mining Waste



Mining Effluents WFFF Waste



Gold Plating Baths Mining Waste



Sr Strontium

Nuclear Waste

APPLICATIONS

WATER PREPROCESSING

Softening Deionization Disinfection

AGRICULTURE, SOIL RECLAMATION **PROCESSES**

Pesticides, heavy metals, nitrates removal Runoff water treatment

CHEMISTRY

Colorants removal Organic acids purification

CATALYSIS

Fiber as strong acid/base catalyst Immobilization of catalysts Metal removal from reaction media

NUCLEAR MEDICINE

Extraction of radionuclides from biological samples and hospital waste

CHROMATOGRAPHY

Biomolecule separation Inorganic ions separation

AWARDS



Selective material for Cs137 decontamination from sea-water



INNOVATION 2030

Rare Earths

recycling



Innovation Awards 2018 Fibers for a cleaner world

ABOUT US

AJELIS, a French company, was born of a collaboration between the French Alternative Energies and Atomic Energy Commission (CEA Saclay) and University Paris-Saclay.

From concept to production of fiber sorbent systems, adhering to stringent specifications, our aim is to contribute to sustainable development, not only within France but on a global scale

We apply our material engineering expertise to address industrial challenges in waste management. Our goal is to provide customers with essential, innovative, and unique services.

Our mission is to deliver systems that maximize the effectiveness of waste treatment processes.

Our fiber metal sorbents are simple, efficient, and environmentally friendly. They allow companies to significantly reduce the size and costs of waste management systems, particularly those involving hazardous materials.

R&D Consultancy Services

- Custom fibers development programs
- Individual consulting and customized solutions in areas related to liquid waste treatment.

INSTITUTIONAL PARTNERS













SUBSIDIARY COMPANY

CHIMIREC, an expert in waste collection and recovery, and AJELIS, have launched AJELCHIM, a joint venture aimed at enhancing environmental protection by offering a full suite of new plug-and-play equipment and services for waste treatment and recycling in France.















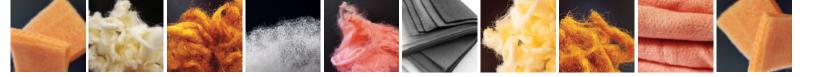


Fiber Materials and Solutions

for waste treatment and metal recycling



Heavy metals treatment Radionuclides decontamination Strategic metals recycling **Precious metals recycling** Organic pollutants removal



METALICAPT® FIBER SORBENTS

New generation of materials with extremely high surface areas

METALICAPT® fiber absorbents offer superior metal capture within a short time frame, providing a credible alternative or complement to ion exchange resins for promoting environmentally responsible industry practices.

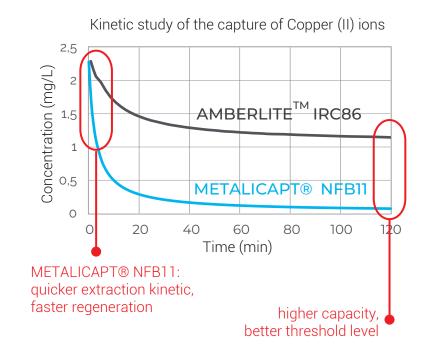
Composed of nano/micro-fibers, these absorbents exhibit significantly enhanced pollutant removal properties compared to existing metal removal technologies. These fibers enable exceptionally high capture speed, selectivity and capacity, while also reducing the frequency of regeneration needs due to their extremely large surface areas.

METALICAPT® addresses the most stringent environmental regulations and the precautionary principle of wastewater treatment and pollutant removal.

HIGHER PERFORMANCES

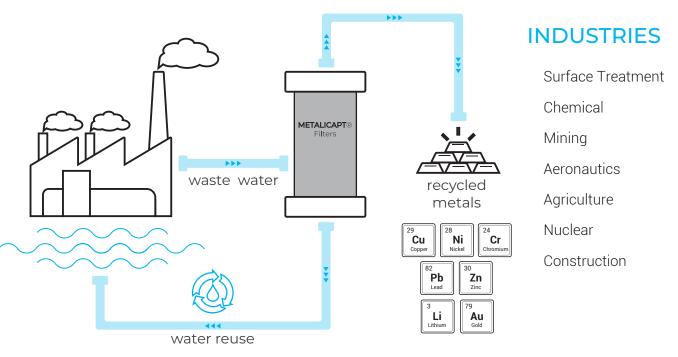
than conventional granular materials

- ✓ Quicker
 > 10 times
- ✓ More capacitive from 2 to 10 times
- ✓ Selective
 Cs, As, Au...
 customization upon request
- ✓ Better Threshold
 ppb
- ✓ Fast regeneration
 ... and "green"



Fibers before use 29 Cu Copper Heavy metals fixed by fibers after filtration

HOW TO APPLY METALICAPT®



METALICAPT® FILTERING SYSTEMS



9 L 1 - 1,2 kg of fibers

0,5 - 1 m3/h flow rate



COLUMN M-7

7 - 8 kg of fibers 2 - 4 m3/h flow rate



WOUND CARTRIDGES

Compatible with standard filter housings in water treatment (9"3/4, 10" or 20", standard or Big Blue)



ADVANTAGES OF OUR SYSTEMS

Efficiency over a wide range of pollutant concentrations

Compliance with the most stringent regulatory requirements

Easy metal recycling

Rapid response in the event of an accident

Easy hazardous metal transport/storage



Filtering systems can be tailored to your specific requirements by our engineering partners





- 1. **Order a "Labo" Test Kit** with columns specifically conditionned with METALICAPT® materials so that you can pass through your effluent and do your own analysis then. Most of materials are regenerable and can be re-used for many experiments.
- 2. Or send us your liquid waste sample and **order a customized study** with tests and analysis.

NEXT STEPS

- 1. Visit our website www.ajelis.com to download the Effluent Survey and send it to contact@ajelis.com.
- 2. We will then get back to you shortly with the best choice of material proposal and a testing protocol.