New solid adsorbents for metals recovery from liquid wastes

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The current explosive development of high tech devices (communication devices, light emitters, magnetic materials, sensors, hardwares ...) relies on a handful of so-called "strategic metals", whose specific properties makes them essential.

Unfortunately, most of them are rare and/or quite diluted in the earth crust. This limits their supply, with huge consequences in terms of availability and costs.

The recovery of these strategic metals from recycled sources thus appears more and more as an essential component of the future supply chains.

Within this frame we developed a new generation of solid adsorbents, allowing for the very selective recovery of targeted metals from various liquid solutions. Some of our results will be presented and discussed.