

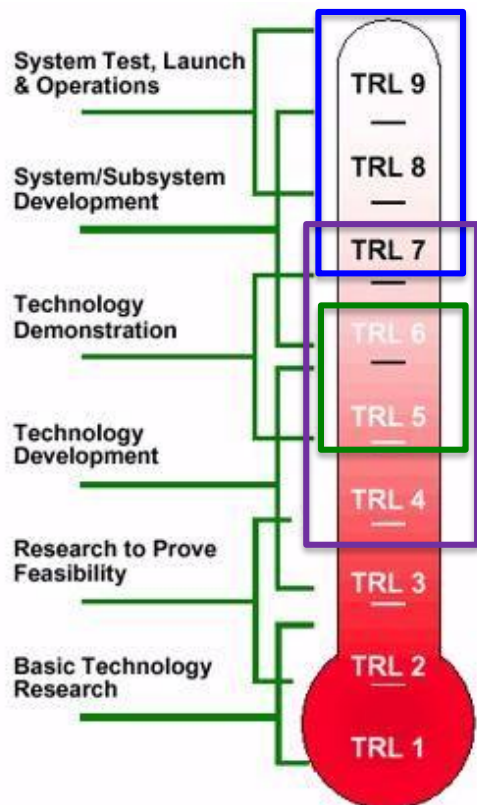
Phosphate-based Materials for Environmental Remediation

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Research in phosphate area



Technology Readiness Level

- ❖ Phosphate for pollutants remediation in liquid phase
- ❖ Industrial wastewater treatment (2015)
- ❖ Batteries



- ❖ Phosphate for pollutants remediation gas phase
- ❖ Catalysis
- ❖ Separation technologies (Dry reforming, Fisher Tropsh)

Energy storage



- Innovative R&D prospects for new market in a short and mid- term
- Development of phosphate based materials for environmental remediation and energy storage
- Circular economy

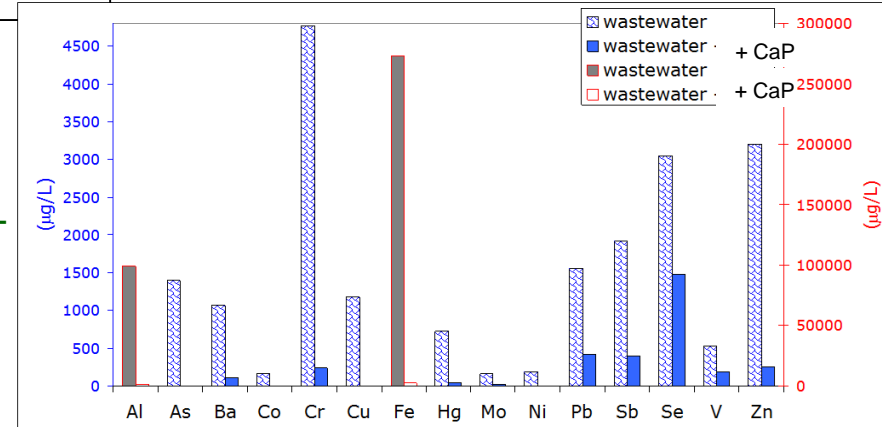
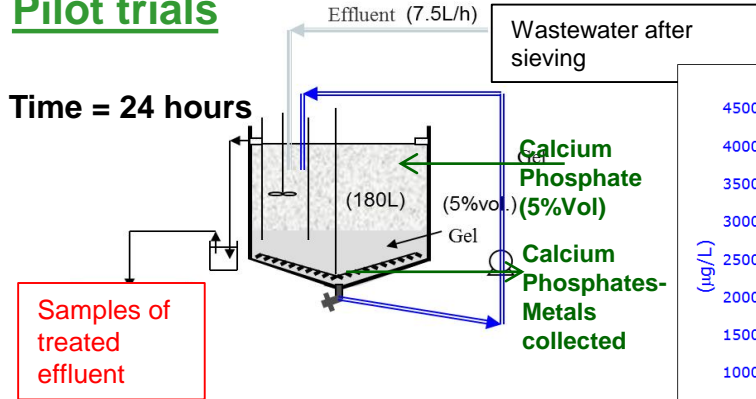
Environmental Remediation Examples

❖ Heavy metals removal from urban and Industrial wastewater treatment plant



Pilot trials

Time = 24 hours



Metal abatement :

73 % < HM* < 99%

50 % < for Se and V < 65 %

HM*: Al, As, Ba, Co, Cr, Cu, Fe, Hg, Mo, Ni, Pb, Sb, Zn

❖ Recycling and regeneration. A sustainable approach

