



Selective recovery of precious metals from printed circuit board with a novel scavenger of thiocarbamate functionalized filter paper

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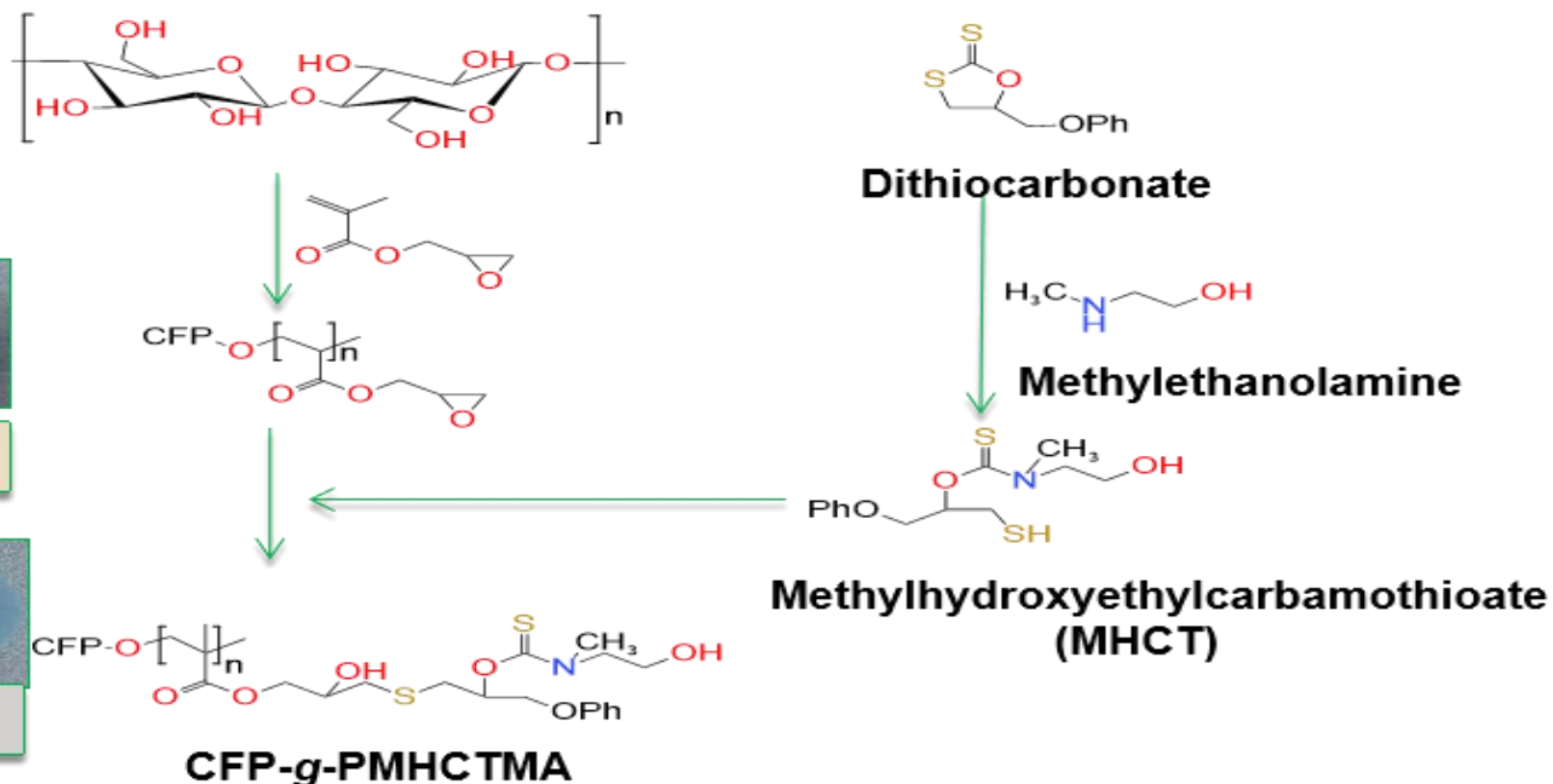
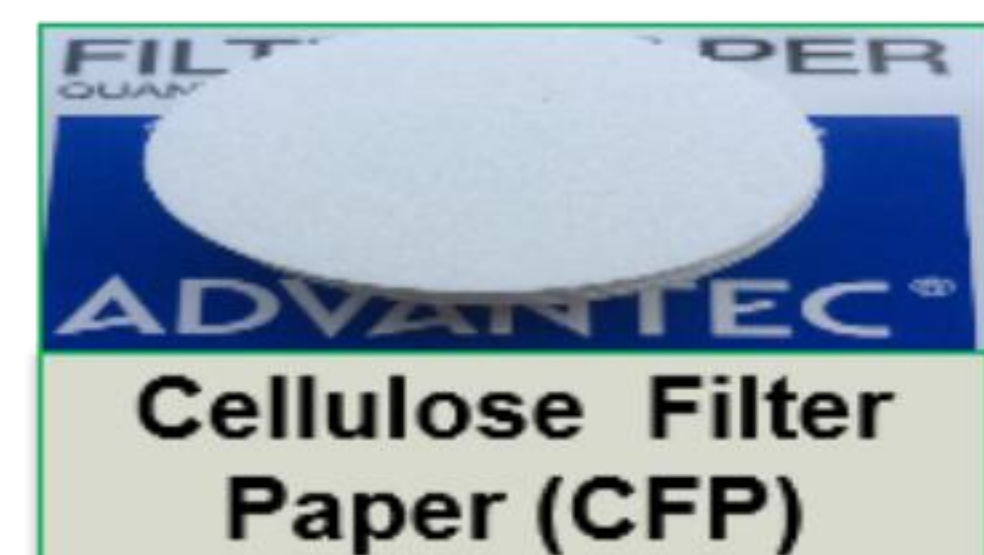
Introduction

- Increasing demand of precious metals (PMs).
- Gradual depletion of high grade ores of PMs.
- Essential to recover and reuse of PMs from secondary resources.

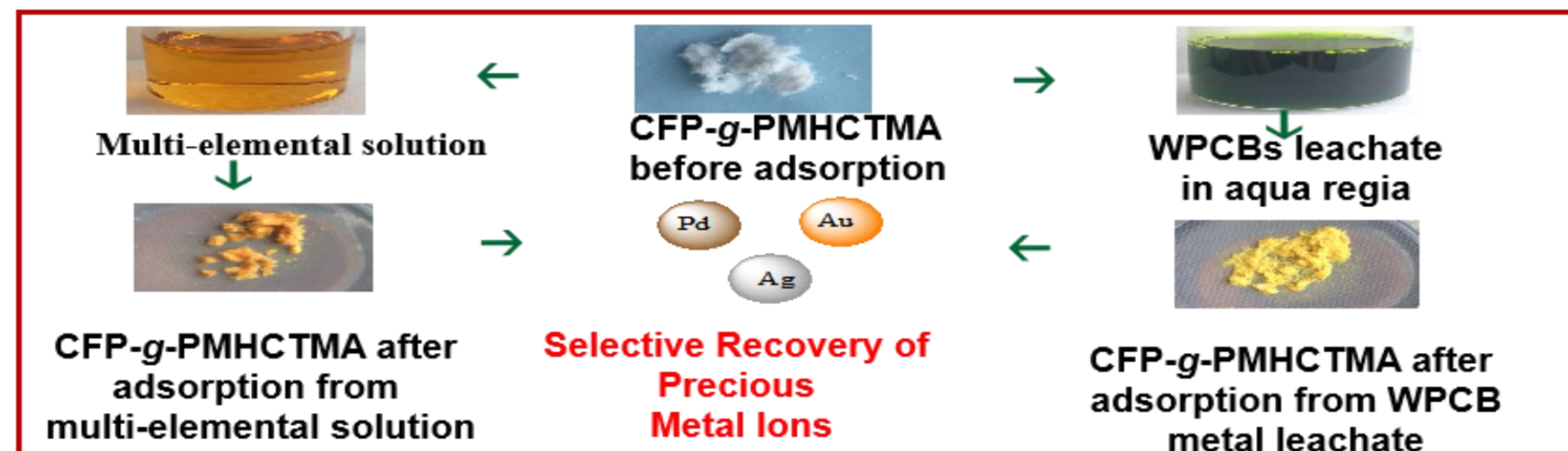
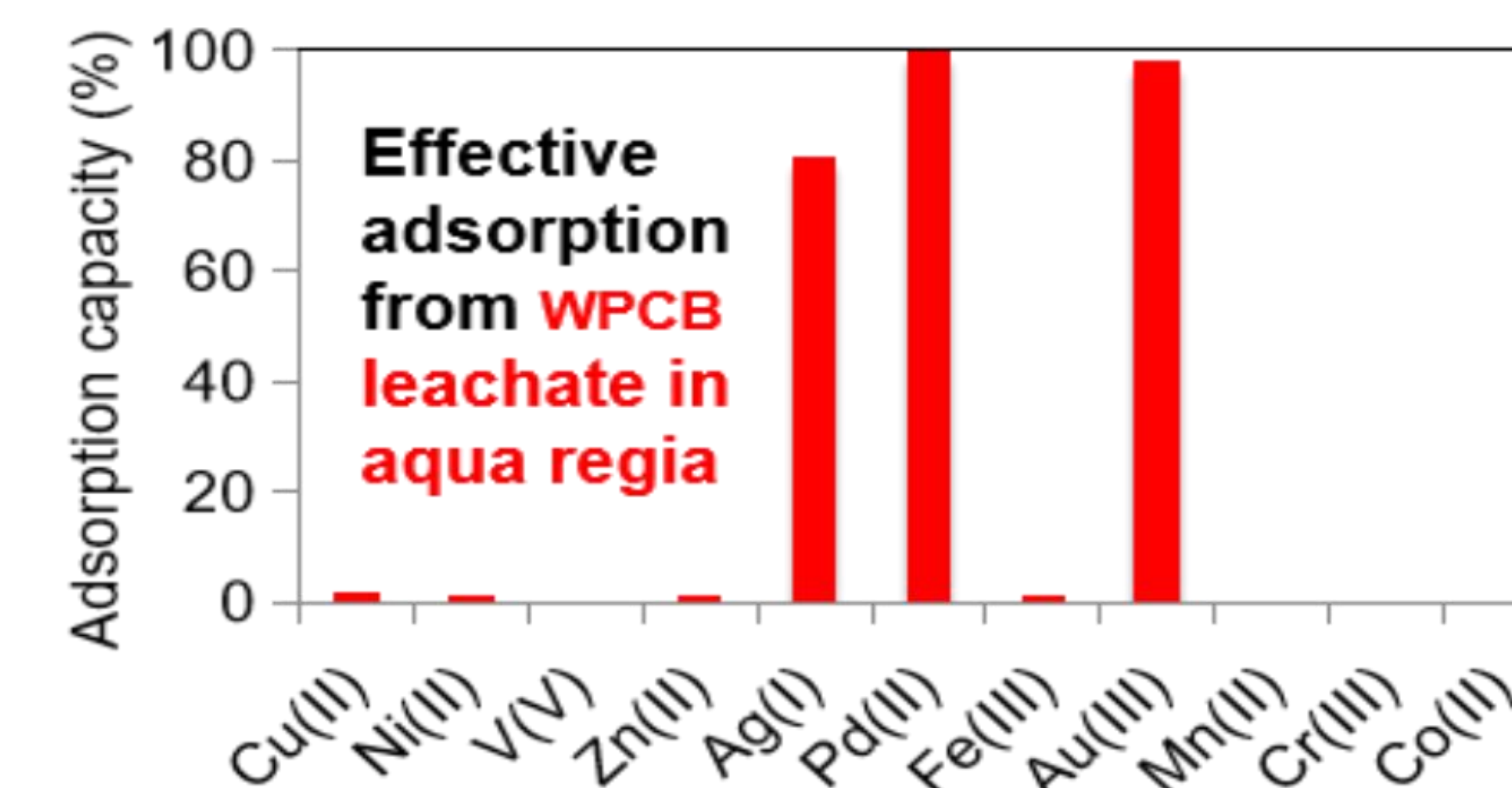
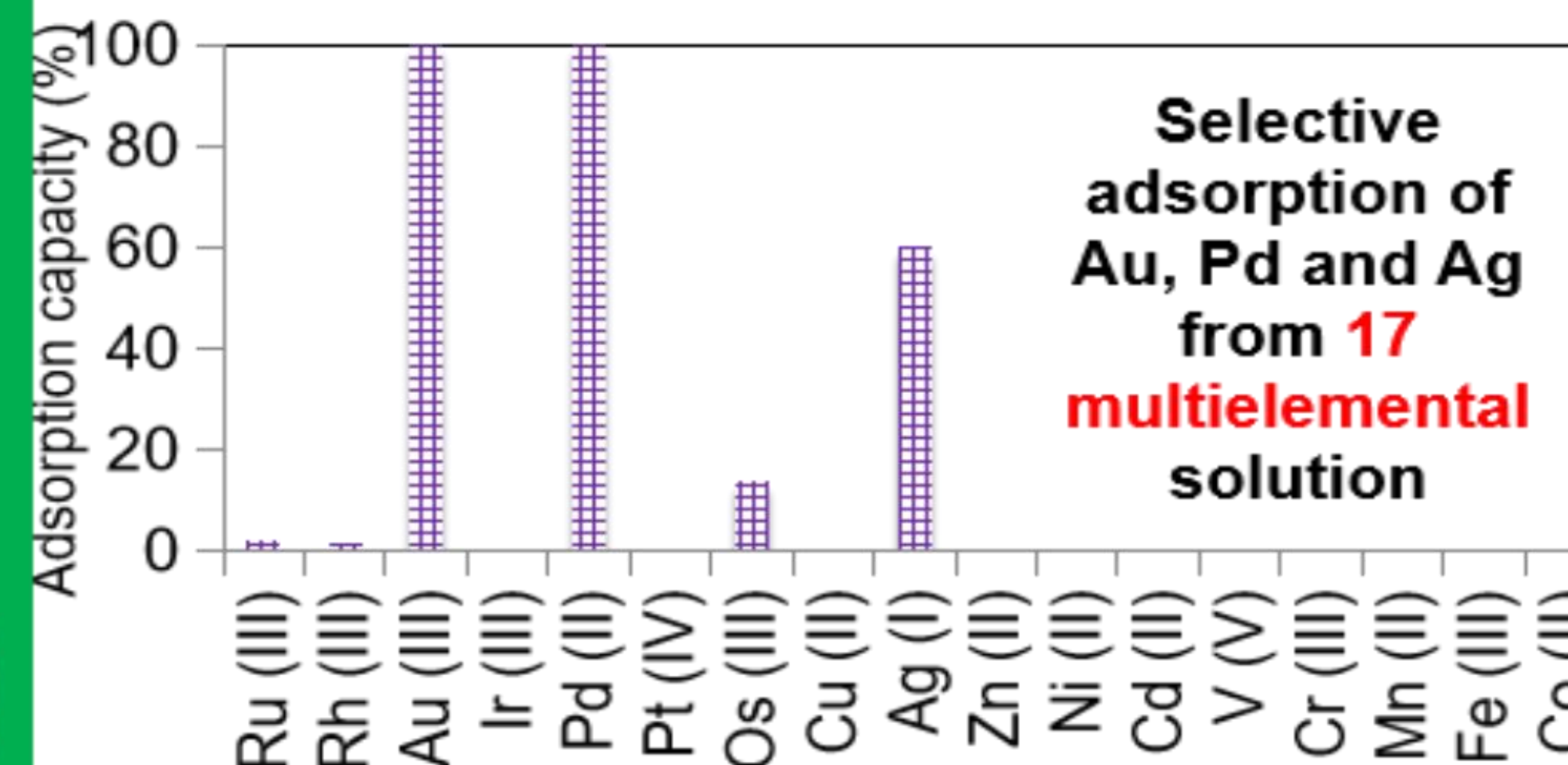
Precious metals are **10 times** more abundant in WPCB than natural ores.

Hence, recycling of e-waste for precious metals has a great importance for conservation and for clean environment

Synthesis of Scavenger



Application



Conclusion

- The noble metal scavenger have
- Good adsorption capacity towards Au(III), Pd(II) and Ag(I).
 - Remarkable selectivity towards Au(III), Pd(II) and Ag(I).
- Outstanding recovery of PMs from WPCB leachate in aqua regia.

