

Tailor-made sorbent materials for metal ions in water remediation

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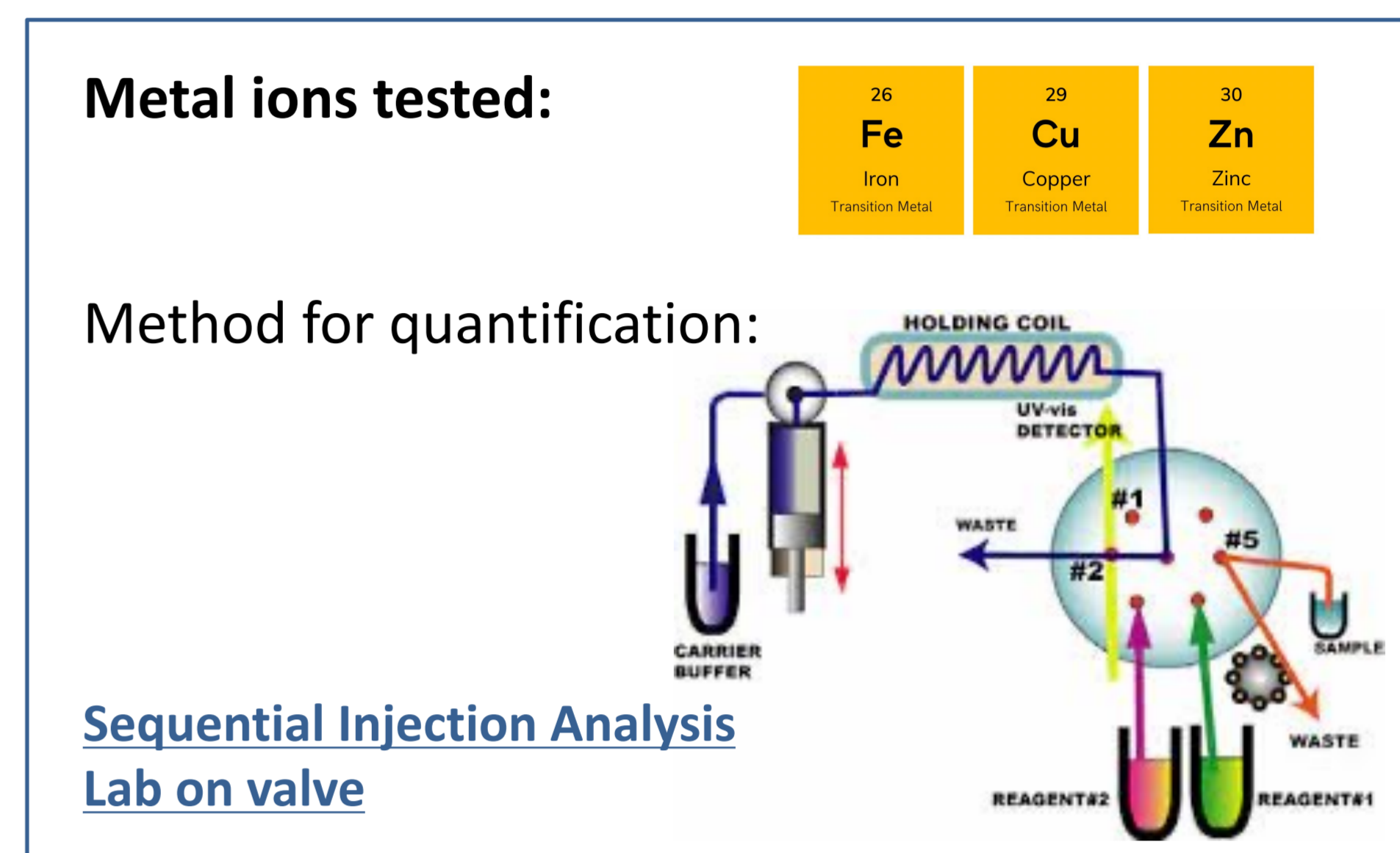
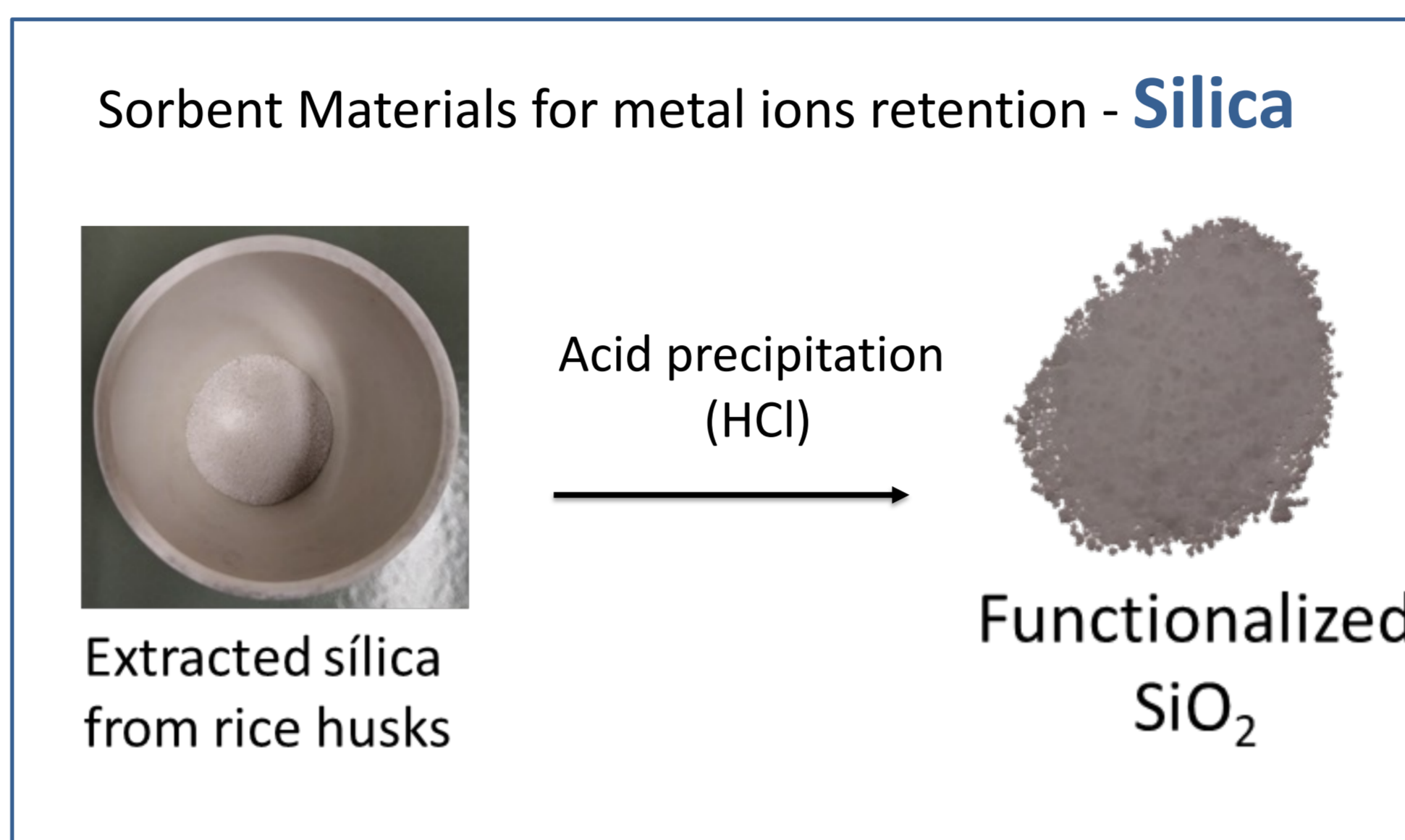
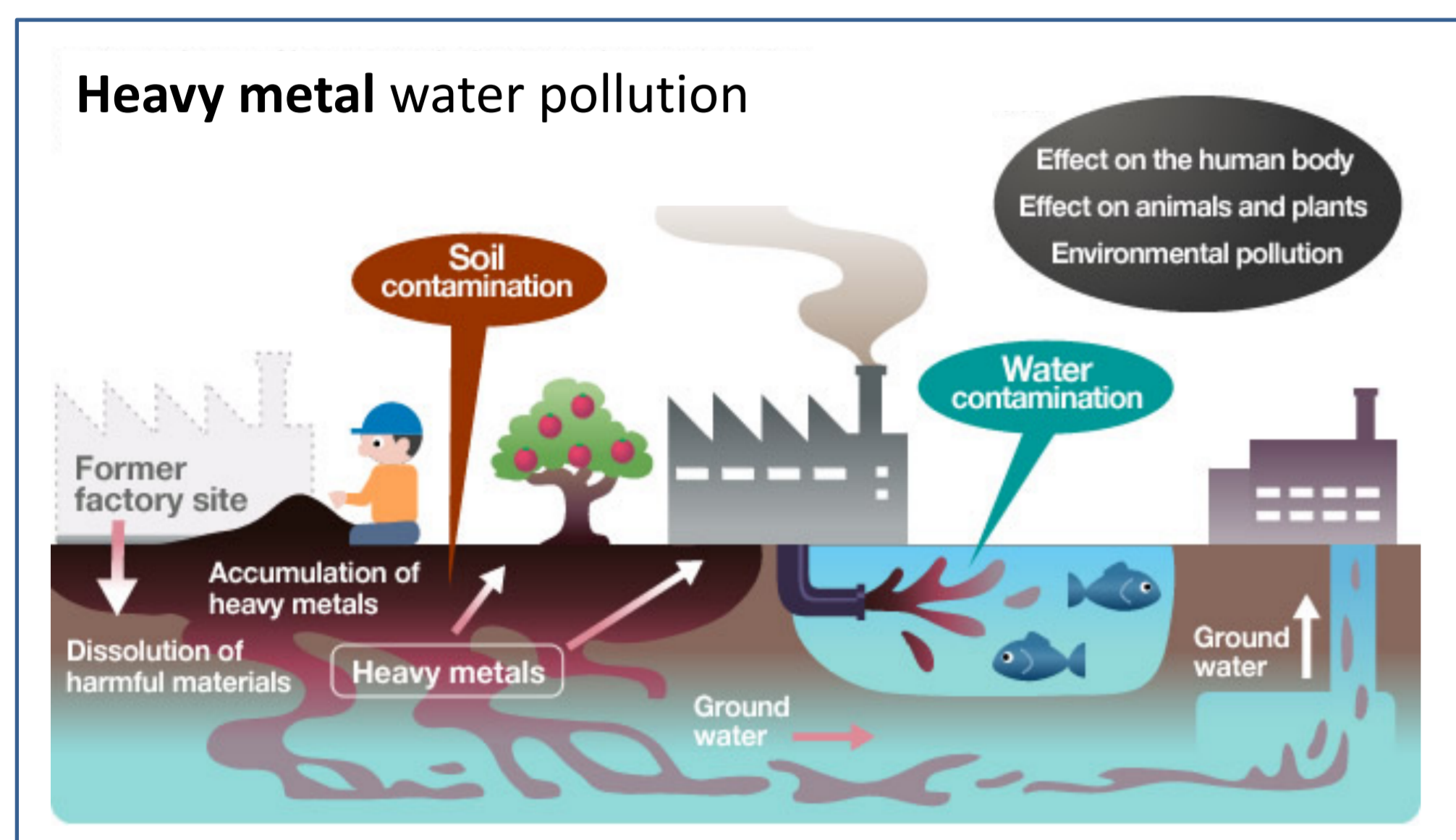
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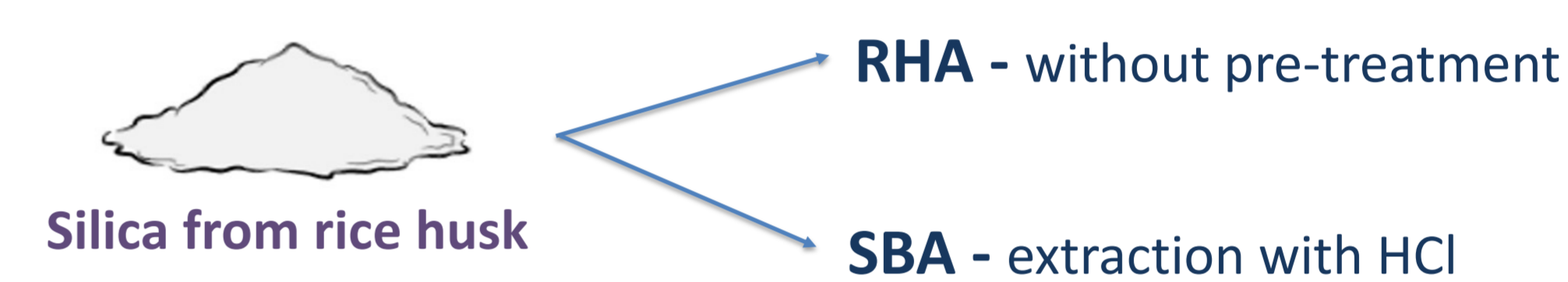
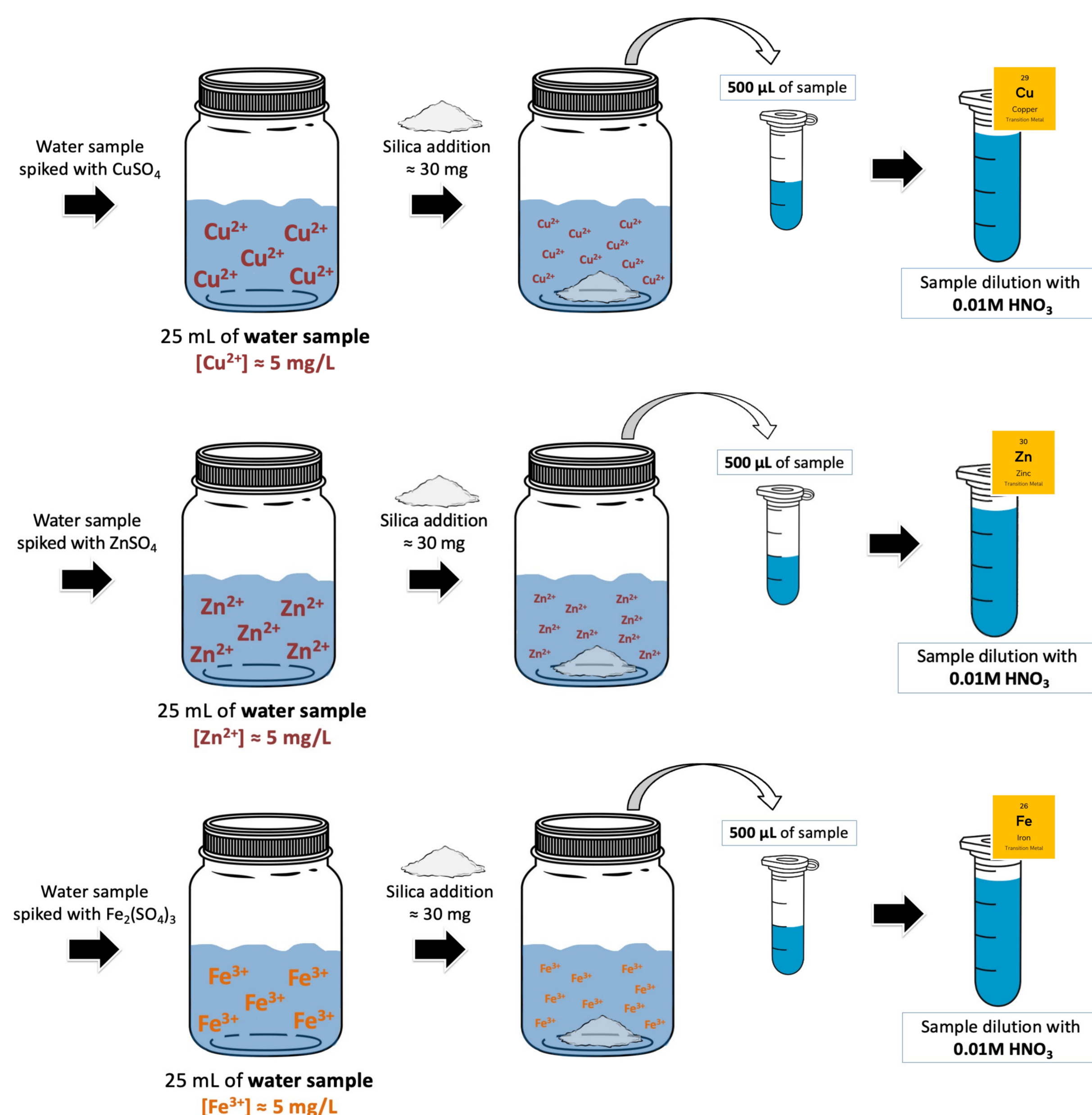
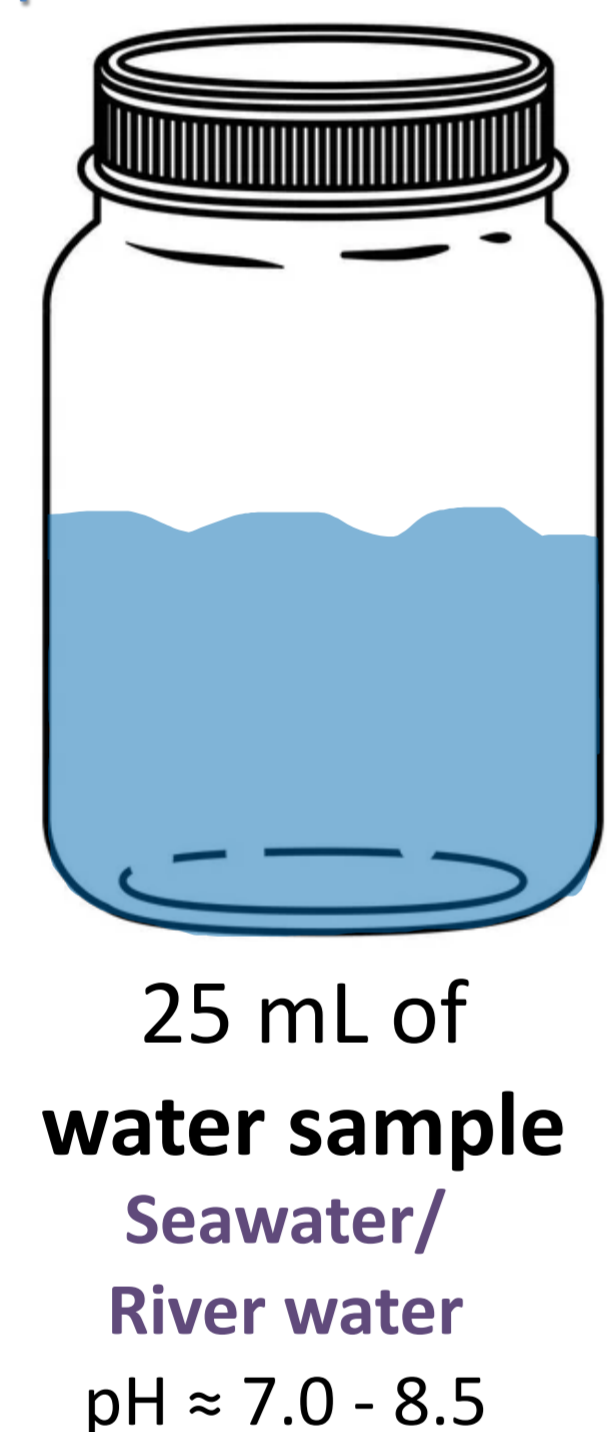
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Analysis and Related Techniques
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Introduction

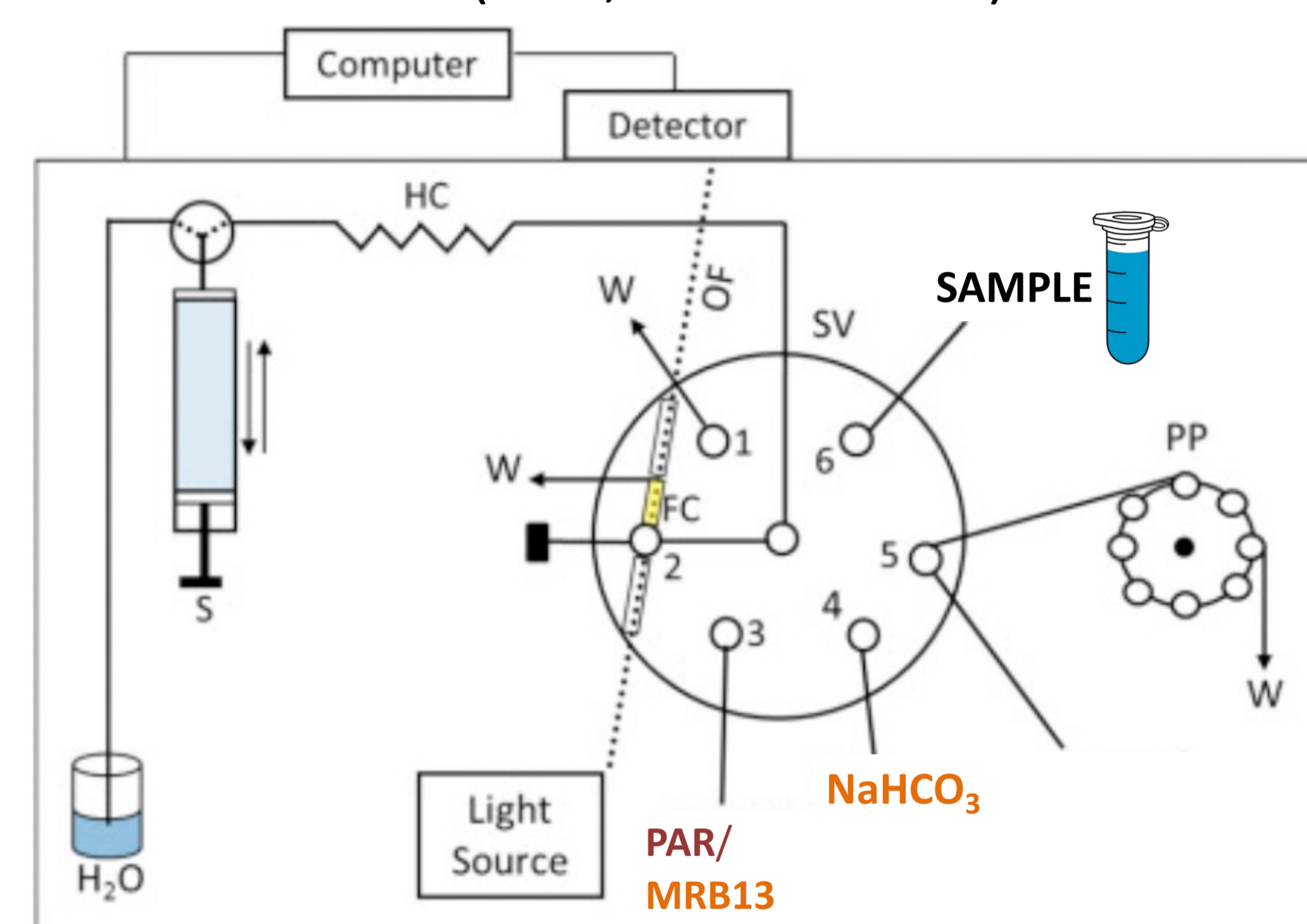


Methods

Microcosmos approach

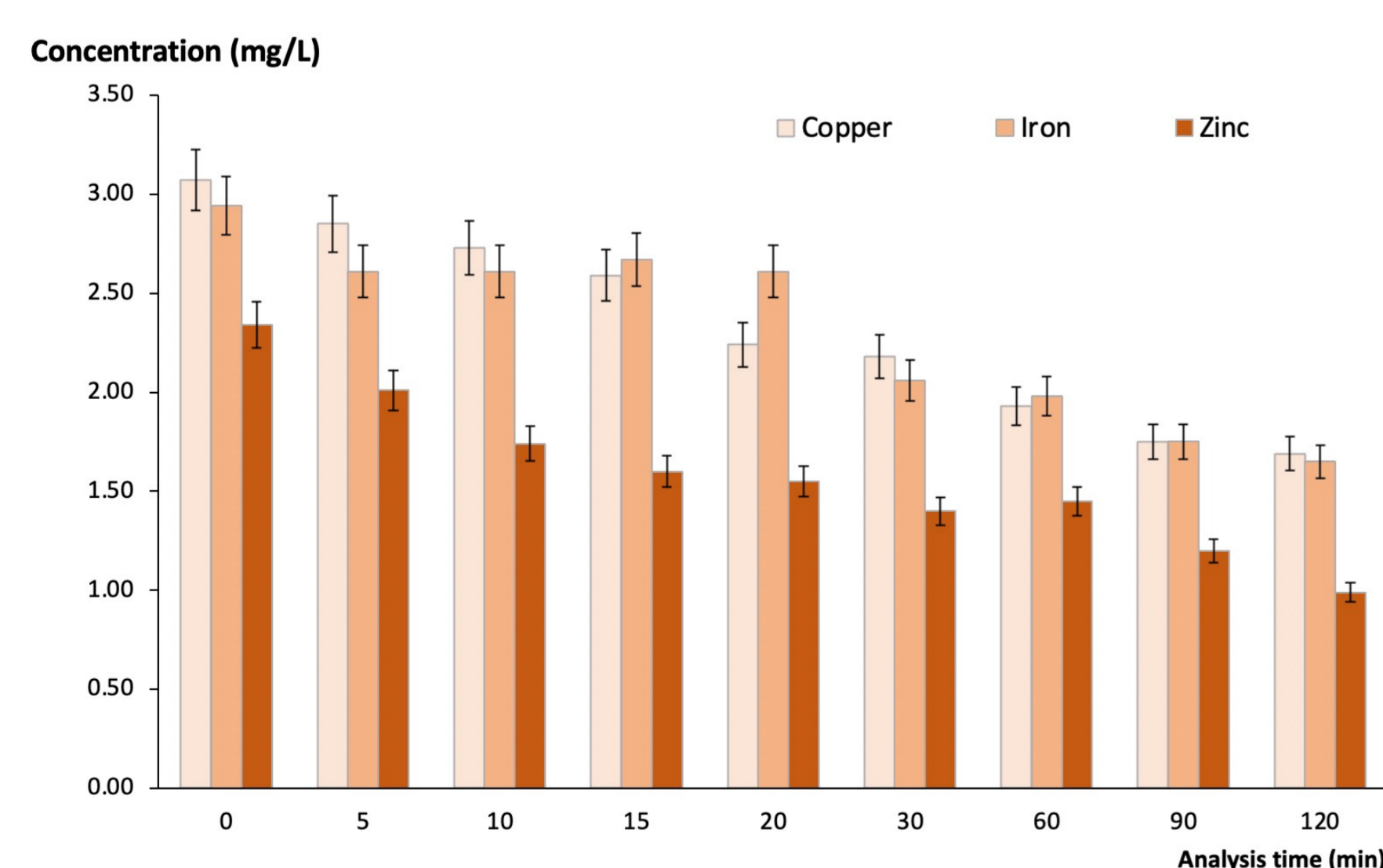


Metal ions determination (Cu²⁺, Zn²⁺ and Fe³⁺)

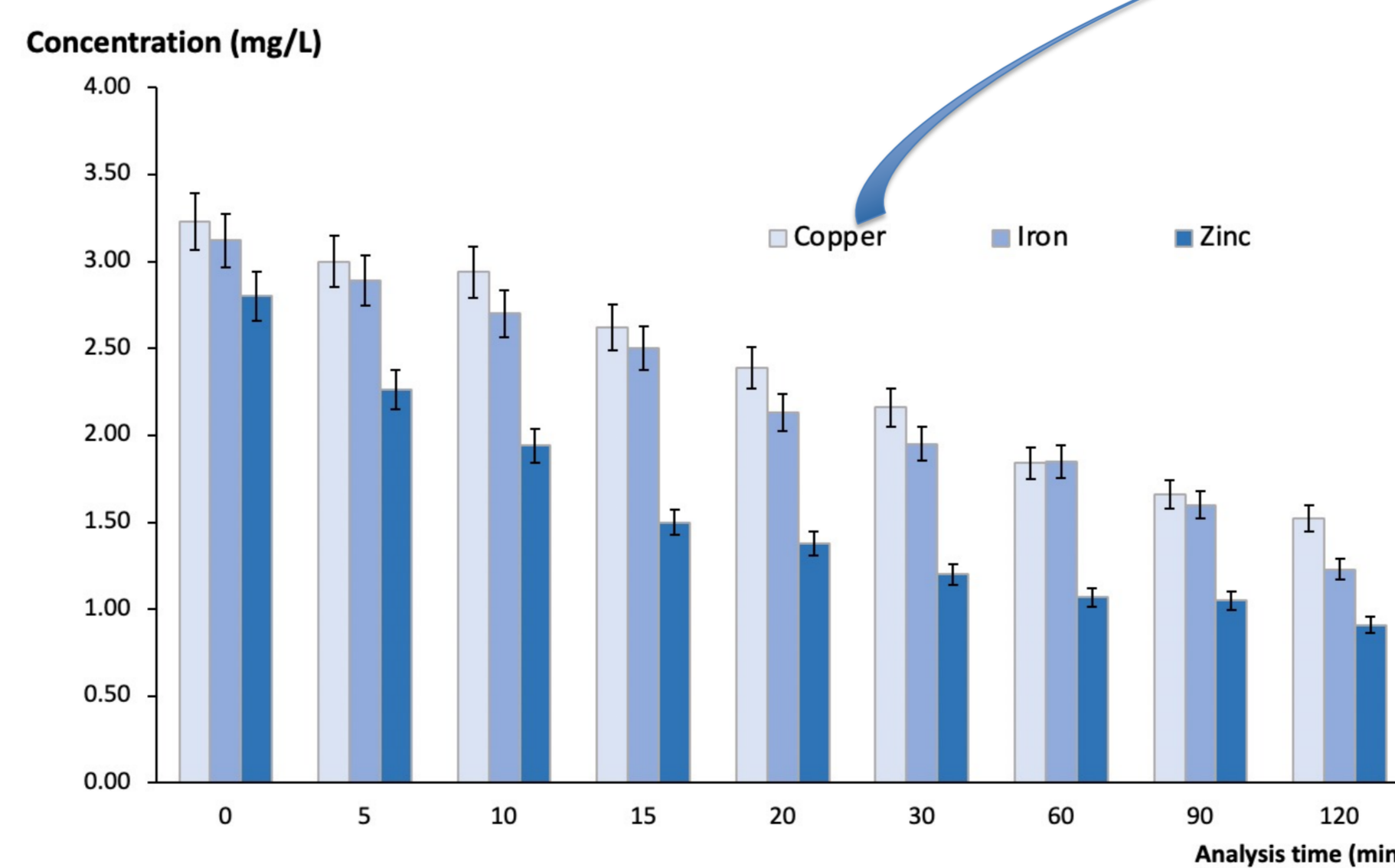


Results

Metal ions removal with RHA



Metal ions removal with SBA



Contact time assessment for copper retention

Analysis time (min)	[Cu] ± SD, mg/L	Copper retention (%)
0	6.78 ± 0.10	
10	5.51 ± 0.01	-19%
20	5.50 ± 0.05	-19%
30	5.04 ± 0.13	-26%
60	4.32 ± 0.02	-36%
90	4.16 ± 0.08	-39%
120	4.02 ± 0.05	-41%
150	3.89 ± 0.02	-43%
180	2.82 ± 0.04	-58%
270	1.24 ± 0.09	-82%
360 (6 hours)	0.516 ± 0.015	-92%



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