

SIMONA-MARIA CUCU-MAN

Research themes

- Pollutant (bio)monitoring/(bio)remediation and dynamics (heavy metals and organic persistent pollutants) in environment (water, air, soil, sediments, biota)
- Removal of toxic compounds from waters by conventional and non-conventional sorption methods (metals, organic dyes) and oxidative degradation (organic dyes)

Analytical chemistry of selected inorganic and organic pollutants in various environment compartments (water, air, soil) and biota

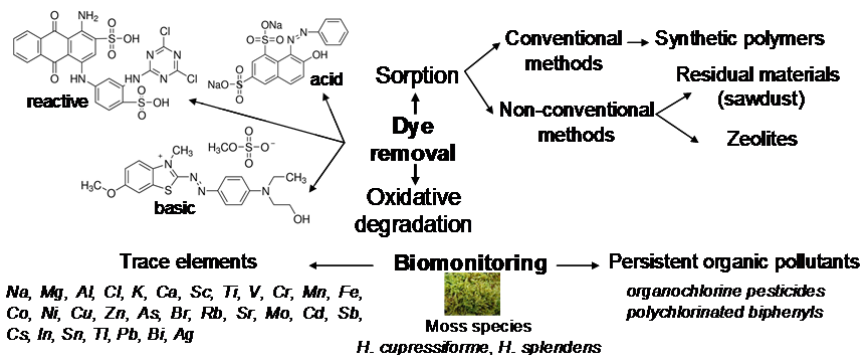
Biomonitoring heavy metals and selected organic pollutants in environment

Pollutant dynamics in environment

Separation and concentration of organic toxic compounds (dyes) and metallic ions by using non-conventional (cellulosic, lignocellulosic, zeolites) materials and synthetic polymers

Oxidative degradation of acid, basic and reactive dyes from wastewaters, in heterogeneous catalytic system containing metallic ions

Keywords: bio(monitoring), heavy metals; trace elements; organic pollutants; water, soil, sediments, biota; acid, basic, reactive dyes; conventional sorbents; non-conventional sorbents; oxidative degradation.



Publications (selection)

Harmens, H., Norris, D.A., Sharps, K., Mills, G., Alber, R., Aleksiyenak, Y., Blum, O., **Cucu-Man, S.M.**, Dam, M. et al., Heavy metal and nitrogen concentrations in mosses are declining across Europe whilst some "hotspots" remain in 2010, *Environmental Pollution*, 200, 93-104, **2015**.

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