Ubiquitous aluminium contamination in water and amyloid hybrid membranes as a sustainable possible solution†

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We develop a membrane technology based on amyloid fibrils to remove aluminium from water and minimize its exposure to humans. We study aluminium adsorption by amyloid fibrils by evaluating the binding isotherms, the thermodynamics and the effects of different parameters. Amyloid-based membranes demonstrate outstanding removal efficiencies beyond 98%.