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Simulations of biomimetic phosphate recovery

The Biomimetic Membrane Group at DTU Environment studies the use of proteins in environmental and biosensing applications. One possible project with this group could be atomic scale simulations of how phosphate binding proteins selectively binds phosphate while discriminating the toxic arsenate. The purpose of such a study is to gain knowledge of the protein binding mechanism and how this can be exploited for phosphate recovery in waste water.

Project type

Topic is suitable for MSc and BSc projects

Pre-requisite

- Basic quantum mechanics and atomic scale physics
- Preferably experience with computational work

Group size

1 student

Department of supervisors

Main supervisor: DTU Environment/Aquaporin A/S
Co-supervisor: DTU Environment

Contact person

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