# Article information:

Highly efficient and selective extraction of phosphorous from wastewater as vivianite in a strategically operated four-chamber flow electrode capacitive deionization - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S0011916422005446>

# Article summary:

1. A four-chamber flow electrode capacitive deionization (FC-FCDI) system was used to extract phosphorous from wastewater in the form of solid vivianite.

2. The FC-FCDI system exhibited a high selectivity for P over SO42− and a water recovery rate of 100%.

3. The precipitated vivianite had a high P content (12.4%) and much smaller volume compared with the P-recovered solution in previous studies.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy, as it provides detailed information on the process of extracting phosphorous from wastewater using a four-chamber flow electrode capacitive deionization (FC-FCDI) system, as well as its advantages over other methods. The article also cites relevant research papers to support its claims, which adds to its credibility.

However, there are some potential biases that should be noted. For example, the article does not explore any counterarguments or alternative methods for extracting phosphorous from wastewater, which could provide readers with a more comprehensive understanding of the topic. Additionally, while the article does mention possible risks associated with this method, such as eutrophication and algae bloom when phosphorous concentrations reach 0.02 mg/L, it does not provide any further details on how these risks can be mitigated or avoided.

In conclusion, while this article is generally reliable and trustworthy due to its detailed information and citations of relevant research papers, there are some potential biases that should be noted such as lack of exploration of counterarguments or alternative methods for extraction and lack of detail on how possible risks can be mitigated or avoided.

# Topics for further research:

* Alternative methods for extracting phosphorous from wastewater
* Mitigation of eutrophication and algae bloom risks
* Advantages of FC-FCDI system over other methods
* Counterarguments to FC-FCDI system
* Phosphorous extraction from wastewater regulations
* Environmental impacts of phosphorous extraction from wastewater

# Report location:

<https://www.fullpicture.app/item/6068af966623461c4f648ba6d1089e2b>