# Article information:

Preparation of iron/calcium-modified biochar for phosphate removal from industrial wastewater - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S0959652622050429>

# Article summary:

1. A novel iron/calcium-modified biochar was prepared to remove high concentrations of phosphate from industrial wastewater.

2. The best type of biochar for phosphate removal was iron/calcium oxide-modified bamboo biochar (ZFCO-BC).

3. ZFCO-BC exhibited a synergistic effect on the removal of 21 metals, including Cr, Cu, Co, Cd, As, Pb, and Y from complex polluted water.

# 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 “Preparation of Iron/Calcium-Modified Biochar for Phosphate Removal from Industrial Wastewater” is an informative and well-written piece that provides a comprehensive overview of the use of modified biochar for the treatment of industrial wastewater containing high concentrations of phosphate and other heavy metals. The article is written in a clear and concise manner that makes it easy to understand the main points being discussed.

The article is based on research conducted by the authors and provides evidence to support their claims. The authors provide detailed information about the preparation process for the modified biochar as well as its performance in removing phosphate from industrial wastewater. Additionally, they provide data from XRD and XANES analyses which further supports their findings.

However, there are some potential biases in the article that should be noted. For example, while the authors discuss how effective their modified biochar is at removing phosphate from industrial wastewater, they do not discuss any potential risks associated with using this method or any possible alternatives that could be used instead. Additionally, while they discuss how effective their modified biochar is at removing multiple heavy metals from complex polluted water bodies such as industrial wastewater and groundwater, they do not explore any counterarguments or present both sides equally when discussing this topic.

In conclusion, while this article provides useful information about using modified biochar for treating industrial wastewater containing high concentrations of phosphate and other heavy metals, it does have some potential biases that should be taken into consideration when evaluating its trustworthiness and reliability.

# Topics for further research:

* Alternative methods for phosphate removal from industrial wastewater
* Potential risks associated with using modified biochar
* Environmental impacts of using modified biochar
* Comparison of modified biochar to other phosphate removal methods
* Cost-effectiveness of modified biochar for phosphate removal
* Regulations and guidelines for using modified biochar in wastewater treatment

# Report location:

<https://www.fullpicture.app/item/058e28999a163e9f663da81f30c825f8>