# Monitoring Aquatic Environment in an Aquarium and Chemistry teaching

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#### Abstract

Oxygen, carbon dioxide, ammonia, nitrites, nitrates, carbonates, bicarbonates, phosphates, sulfates and other substances can be counted among the reactants, products or intermediates of complex biochemical processes that take place in every biosystem. Their presence or significant changes in concentration signal conditions that are reflected in the quality and stability of the life processes of the monitored system. An aquarium can be considered one of such more or less closed and isolated biosystems. Direct or indirect monitoring of these substances in the aquarium can therefore serve not only as an example of the application of research methods in practice, but also as a basis for applied chemistry teaching.

The poster presents the school aquarium as an ecosystem that can be used in the study of biology, physics and chemistry. The text describes the possibilities of monitoring physical and chemical quantities. Their values influence the quality of the aquatic environment for fish and other organisms. Attention is mainly focused on pH and its influence on life in the aquarium.

## References

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### Keywords

aquarium, applied chemistry teaching, monitoring of basic quantities