# Article information:

(PDF) Detection Limits of Antibiotics in Wastewater by Real-Time UV–VIS Spectrometry at Different Optical Path Length
<https://www.researchgate.net/publication/366073131_Detection_Limits_of_Antibiotics_in_Wastewater_by_Real-Time_UV-VIS_Spectrometry_at_Different_Optical_Path_Length>

# Article summary:

1. UV-Vis spectroscopy combined with chemometric methods is a promising choice for monitoring antibiotics in wastewater.

2. Two immersed in situ UV–Vis sensors were used to explore the relationship between absorption spectra and antibiotics and study the influence of the optical path length on the LOD.

3. Multiple antibiotics in the wastewater were investigated in real-time manner, and results indicate that the model has a good predictive ability.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article “Detection Limits of Antibiotics in Wastewater by Real-Time UV–VIS Spectrometry at Different Optical Path Length” provides an overview of how ultraviolet–visible (UV–Vis) spectroscopy can be used to monitor antibiotics in hospital and pharmaceutical wastewater. The article is written by a team of researchers from various institutions, which adds credibility to its claims. The authors provide evidence for their claims through experiments conducted using two immersed in situ UV–Vis sensors, as well as multiple antibiotics in wastewater samples measured with different concentrations of tetracycline, oﬂoxacin, and chloramphenicol. The results indicate that the model has a good predictive ability.

The article does not appear to have any biases or one-sided reporting, as it presents both sides equally and does not make any unsupported claims or missing points of consideration. Furthermore, there is no promotional content or partiality present within the article, as it focuses solely on providing information about the use of UV–Vis spectroscopy for monitoring antibiotics in wastewater samples. Additionally, possible risks are noted throughout the article, such as potential contamination from pharmaceuticals and other chemicals present within wastewater samples.

In conclusion, this article appears to be reliable and trustworthy due to its lack of bias or one-sided reporting, supported claims with evidence provided through experiments conducted by researchers from various institutions, lack of promotional content or partiality present within the article, noting possible risks associated with monitoring antibiotics in wastewater samples, and presenting both sides equally without making any unsupported claims or missing points of consideration.

# Topics for further research:

* Pharmaceutical wastewater contamination
* Antibiotic detection limits
* UV–VIS spectroscopy applications
* In situ UV–VIS sensors
* Tetracycline, oﬂoxacin, and chloramphenicol concentrations
* Risks associated with monitoring antibiotics in wastewater

# Report location:

<https://www.fullpicture.app/item/b02e579e13be05319157fe3e0c0fb1a6>