# Article information:

Fluorescence Approach for the Determination of Fluorescent Dissolved Organic Matter | Analytical Chemistry
<https://webvpn.cwnu.edu.cn:8106/https/77726476706e69737468656265737421e0e2438f69316b4330079bab/doi/10.1021/acs.analchem.7b00324>

# Article summary:

1. Fluorescence spectroscopy coupled with parallel factor (PARAFAC) analysis can be used to characterize chromophoric DOM in environmental samples.

2. PARAFAC analysis decomposes the original data into trilinear components, with each component consisting of one score vector and two loading vectors (emission and excitation spectra).

3. The use of more components in Diltiazem contributes to a more correct and robust decomposition result from data sets that do not conform to trilinear structure.

# 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 fluorescence approach for the determination of fluorescent dissolved organic matter using excitation–emission matrix (EEM) fluorescence spectroscopy coupled with parallel factor (PARAFAC) analysis. The article also provides evidence for its claims by citing relevant studies and research papers, which adds credibility to the article. Furthermore, the article does not appear to be biased or partial towards any particular point of view, as it presents both sides of the argument equally.

However, there are some points that could have been explored further in the article. For instance, while the article mentions that PARAFAC analysis may decompose HA into more than a single component, it does not provide any evidence or examples to support this claim. Additionally, while the article mentions that sloping peak in the EEM landscape destroys the independence of excitation and emission spectra, it does not provide any details on how this affects PARAFAC analysis or what measures can be taken to address this issue.

In conclusion, overall the article is reliable and trustworthy but could have explored certain points further for a better understanding of its subject matter.

# Topics for further research:

* Impact of sloping peak on PARAFAC analysis
* Determination of fluorescent dissolved organic matter
* Excitation–emission matrix fluorescence spectroscopy
* PARAFAC analysis decomposition
* Independence of excitation and emission spectra
* Mitigation of sloping peak in EEM landscape

# Report location:

<https://www.fullpicture.app/item/d41fa3910e356524991c7893818e7a76>