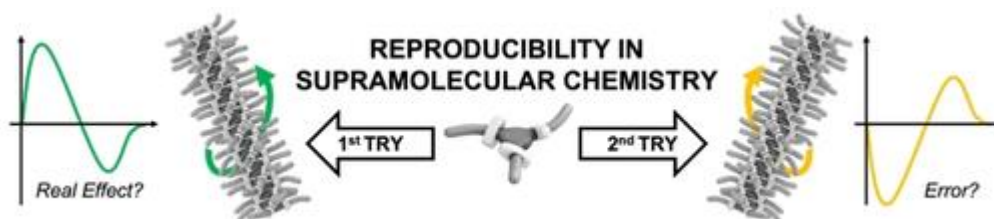


How Subtle Changes Can Make a Difference: Reproducibility in Complex Supramolecular Systems

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Who are the corresponding authors and what are their research areas?

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E.W. "Bert" Meijer is Distinguished University Professor in the Molecular Sciences, Professor of Organic Chemistry at the Eindhoven University of Technology. He is an organic and physical chemist, mostly known for his pioneering studies in the field of supramolecular polymerization. His research spans from the synthesis of supramolecular polymers to the study of their polymerization process, their chirality and their stereochemistry. Moreover, his group also studied the application of supramolecular polymers to electronics and biomaterials.

What is the main claim of the article?

Main claim: In this scientific perspective, the authors report several examples involving supramolecular structures, where the reproducibility of these experiments can be tremendously affected by subtle changes. Leveraging on their experience in the field of supramolecular chemistry, the authors carried out a series of experiments, corroborating how small effects can drastically influence the outcome of the tests, leading to unexpected results.

In particular, they meticulously detail the different experimental conditions on the same test and unveil the issues in the reproducibility that can arise. From each experiment, they draw a final lesson learnt.

Relevance: The present scientific perspective can be viewed as a first attempt to draw attention to overlooked details and a first starting point to on the importance of reporting experimental details to increase reproducibility in supramolecular chemistry.

How is it demonstrated?

Demonstration: For each example reported, different kind of analysis is carried out. In most of the cases, $^1\text{H-NMR}$ and ECD analyses are carried out.

Which are the key related papers?