# Article information:

Stability and Lifetime of Quadruply Hydrogen Bonded 2-Ureido-4[1H]-pyrimidinone Dimers | Journal of the American Chemical Society
<https://pubs.acs.org/doi/full/10.1021/ja000435m>

# Article summary:

1. The article discusses the challenges of constructing molecules that associate in a strong, directional, and selective way.

2. It focuses on the use of multiple hydrogen bonds to construct large and stable supramolecular structures.

3. The article examines the dimerization constants of 2-ureido-4[1H]-pyrimidinone derivatives, which feature a DDAA array of hydrogen bonding sites, and uses excimer fluorescence and dynamic NMR studies to determine the equilibrium dimerization constant Kdim in different solvents.

# 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 is written in an objective manner and provides a comprehensive overview of the challenges associated with constructing molecules that associate in a strong, directional, and selective way. The authors provide evidence for their claims by citing relevant literature throughout the text. Furthermore, they present data from experiments conducted to measure the dimerization constants of 2-ureido-4[1H]-pyrimidinone derivatives using excimer fluorescence and dynamic NMR studies.

The article does not appear to be biased or one-sided as it presents both sides of the argument equally. Additionally, all claims are supported by evidence from experiments or relevant literature citations. There are no unsupported claims or missing points of consideration in the article.

The only potential issue with this article is that it does not explore any counterarguments or alternative explanations for its findings. However, this is not necessarily an issue as this type of research paper typically focuses on presenting results rather than exploring alternative explanations for them.

In conclusion, this article appears to be trustworthy and reliable as it is written objectively and all claims are supported by evidence from experiments or relevant literature citations.

# Topics for further research:

* Molecular dimerization
* Selective molecular association
* Excimer fluorescence
* Dynamic NMR studies
* Molecular recognition
* Supramolecular chemistry

# Report location:

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