Poster

The effect of high pressure on the crystal structure of organocatalysts

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When subjected to high pressure, a crystal structure can undergo significant alterations [1]. These changes may involve modifications in molecular conformation, supramolecular assembly and overall molecular organisation of the crystals. A comparative study was carried out on a Quinine Catalyst, HOF and boron catalyst among other organocatalysts under both the ambient and high-pressure conditions to examine their structural responses [2-4]. Through careful examination and comparison of the findings, insights were obtained into the effects of high pressure on the crystal structures of these catalysts. This systematic investigation came up with valuable data on the alterations in multiple parameters e.g. intermolecular interactions, packing arrangements etc. induced by high pressure. Such examinations contribute notably to the deeper understanding of the behaviour of the organocatalysts under extreme conditions, contributing practical insights into their reactivity and potential applications in diverse chemical processes.

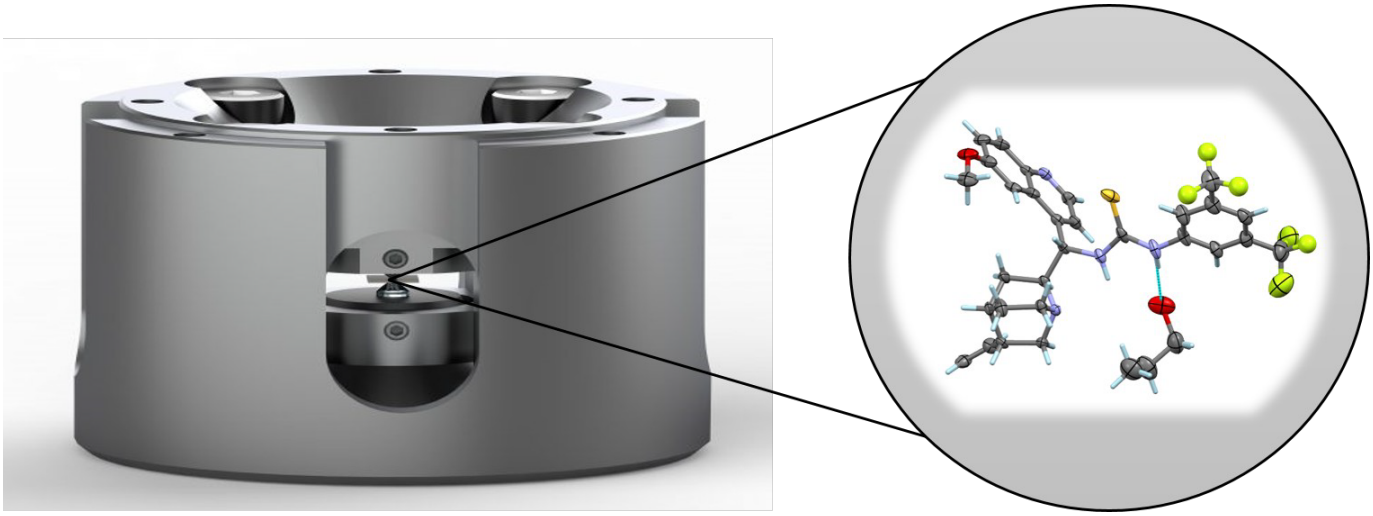

Figure 1. Diamond Anvil Cell and one of the experimental organocatalysts.

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