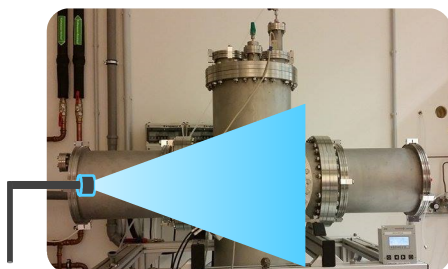


Time-resolved rotational spectroscopy of carboxylic acids. Identification and quantification of the components from heating adipic acid

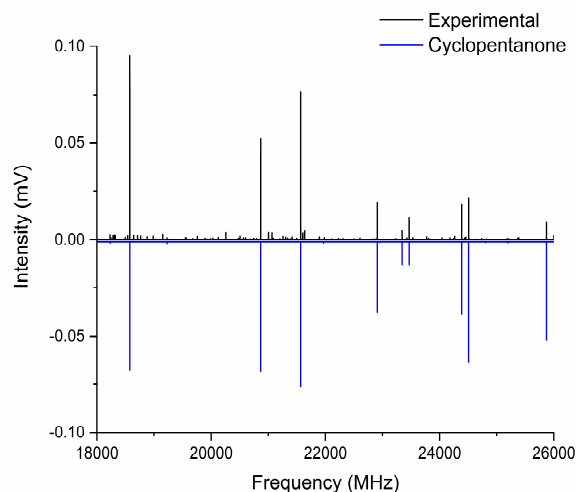
Pablo Pinacho, Wenhao Sun, Daniel A. Obenchain, Melanie Schnell FS-SMP



Alexander von Humboldt
Stiftung / Foundation

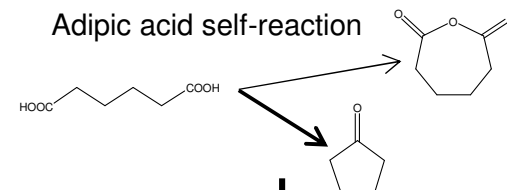


Adipic acid in the nozzle
Rep. rate – 30 Hz
Carrier gas – Neon
Backing pressure – 3 bars
T nozzle – 160 °C

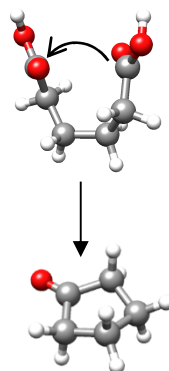
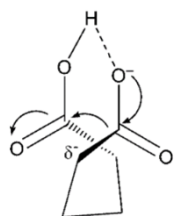
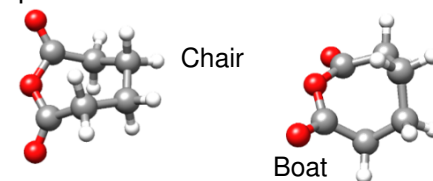


We were not expecting cyclopentanone

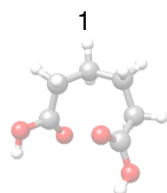
Adipic acid self-reaction



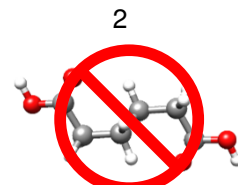
Two forms of adipic anhydride from quantum-chemical calculations



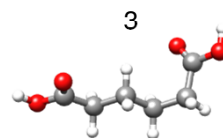
Three conformations of adipic acid from quantum-chemical calculations



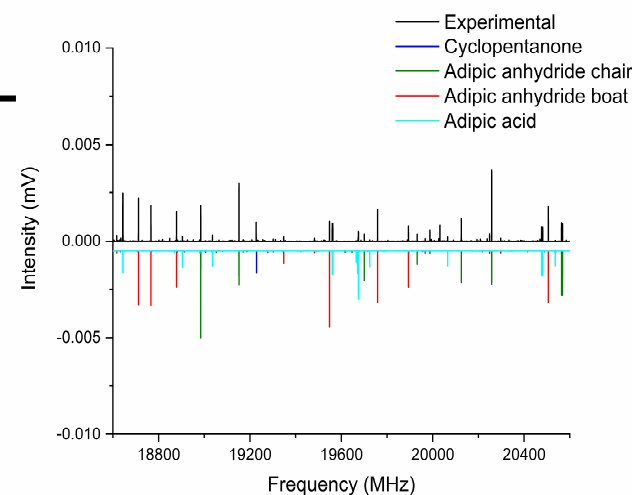
Not found



Invisible to us



Found experimentally



Both forms of the anhydride found experimentally