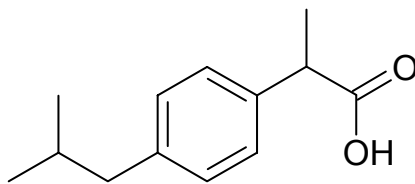


Solid State NMR for the Pharmaceutical Industry

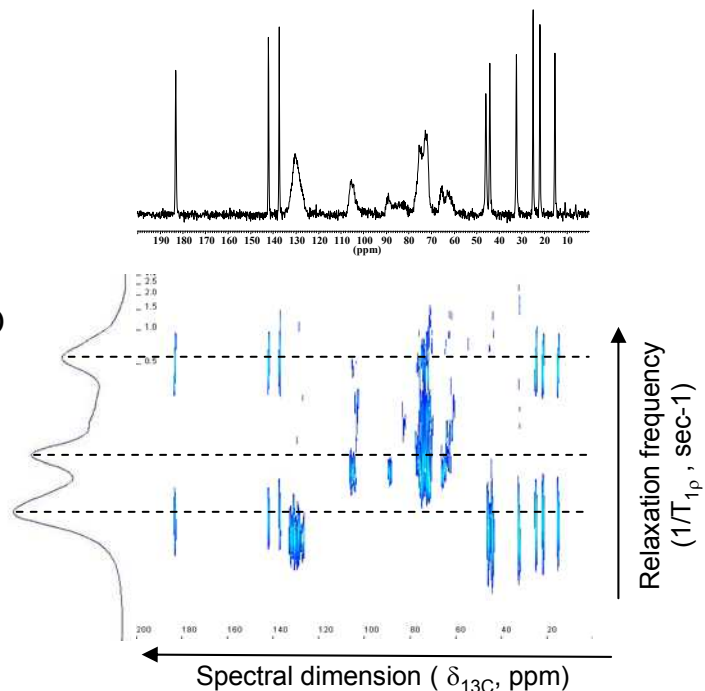
- Polymorphs recognition on polycrystalline powders
- Mixture quantification at low level of presence
- Level of mixture, microscopic, macroscopic
- Hydration recognition, Solvation /Desolvation recognition
- Crystallinity assessment
- Formulation recognition, and certification
- Excipients to Active ingredient interactions
- Excipients origin recognition
- New polymorphs identification on powders
- Ageing of tablets, capsules, pills.



Ibuprofen

Upfen, Bristol-Meyers-Squibb/UPSA

¹³C CPMAS NMR of Ibuprofen as Upfen from UPSA. Excipients are amorphous, with broad lines, unlike Ibuprofen, well crystallized with narrow lines. In relaxation frequency dimension excipients and active molecules are differentiated.



Engineering the NMR analytical process.

ssNMR is not one single technique, but an ensemble of techniques. For new analytical questions, a new combination of tools is needed. Engineering solutions by NMR is our competence, in ssNMR as well as lsNMR.