

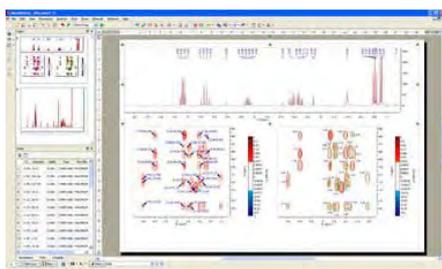
Capability/Need

- **Upgrades** four to six NMR consoles to the latest generation. Will support the most modern and demanding pulse-sequences for NMR users.
- 900-, 800-, 750-, 500-MHz wide-bore (imaging) and 300-MHz wide-bore NMR systems
- Boosting RF electronic horsepower of an impressive suite of NMR capability



Science/Users

- Improved designs allows very precise and accurate measurements
- Impacts all science areas including energy, materials, catalysis, carbon and emission/capture, biological complexes.



EMSL Strategy Alignment; Specifics

- Science themes: Biological Interactions/Dynamics; Geochemistry/Biogeochemistry and Subsurface Science; Science of Interfacial Phenomena
- Cross-cutting challenges: Static-Dynamics; Unprecedented Resolution; Design/Syn Complex Materials; Predict Biological Function; Linking Theory/Experiment
- EMSL capability area: NMR and EPR
- Anticipated availability: October 2010
- Technical POC: Dave Hoyt