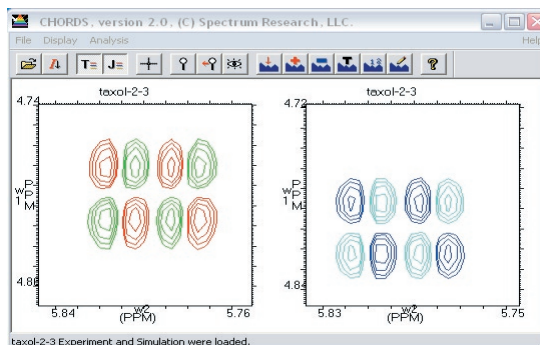
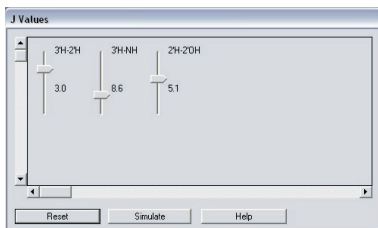


CHORDS - Graphical Simulation

Tools to Speed Up the COSY Spectral Analysis Process

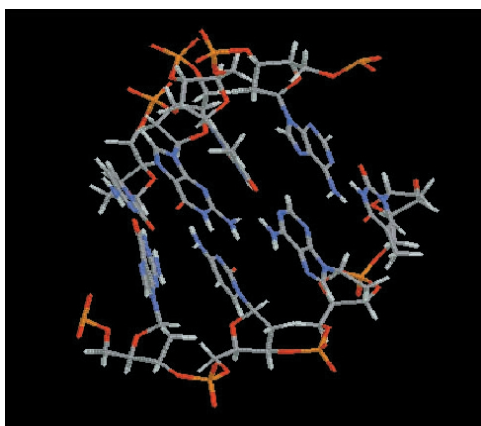
- CHORDS (Coherent HOmonucleaR spin Dynamics Simulation) provides an interactive graphical comparison of spectral simulation.
- Simulates homonuclear J-correlated spectra of weakly and strongly coupled spins, and takes into consideration the experimental acquisition and processing parameters.
- Provides a quantitative measurement of J-couplings, along with being able to control the display parameters of experimental and simulation data.
- Imports a variety of vendor formats (Bruker, Varian, JEOL, Felix, Triad, NMR-Compass).
- Measures J-coupling constants.



- Provides the ability to simulate severely overlapped cross peaks by handling several spin systems simultaneously.
- Performs fast simulations on either complete or partial regions of the spectrum.
- Provides an interactive graphical interface to vary the coupling constants (J) of the spin systems and monitor the simulated spectra.
- Allows for spectral simulation and comparison with experimental data for assisting NMR assignment of Protein, DNA, and other natural products data.

TANDY - DNA Structure Determination

Tools to Speed Up the DNA Structure Determination Process



- TANDY's zip-up algorithm is efficient in minimizing double-stranded DNA structures, and its torsion space algorithm ensures unbiased sampling of the conformational space.

Torsion Angle Approach to Nucleic Acid Distance Geometry

- TANDY provides a fast means of generating a family of DNA structures consistent with NMR distance constraints.
- TANDY takes explicit advantage of the chemical structure and connectivity of the given sequence of DNA to derive information on the torsion dependence of interatomic distances.
- TANDY's fast-minimization algorithm is ideal for interactive use in conjunction with other complementary algorithms (such as those used for spectral simulation, energy minimization, and molecular dynamics calculations).
- TANDY uses fixed sugar geometry in each nucleotide during minimization.

Spectrum Research, LLC. also offers value-added Contract Research Services through its subsidiary, Spectrum Research Labs.

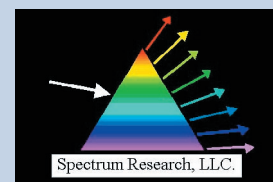
Spectrum Research Labs specializes in the NMR spectral data collection, processing, analysis, 2-D NMR structure elucidation (of natural products and organic compounds), and 3-D NMR structure determination (of proteins and DNA).

The Following Services Are Available:

1D, 2D, 3D, and nD NMR
Data Collection & Analysis of:
Natural Products
Organic Molecules
DNA
Peptides and Proteins

High-field 500 to 750 MHz
(CryoProbe available)

For more information, visit
www.specres.com/labs/company.asp



Spectrum Research, LLC.

505 South Rosa Road Suite 119
Madison, WI 53719

T: 608.233.4882
F: 608.233.1870

www.specres.com