Literature references of Chirascan CD Spectrometer employed to characterize interactions between proteins and small molecules

Small organic molecule binding

Acetylphosphinate is the most potent mechanism-based substrate-like inhibitor of both the human and E. coli pyruvate dehydrogenase components of the pyruvate dehydrogenase complex.

Natalia S. Nemeria, Lioubov G. Korotchkina, Sumit Chakraborty, Mulchand S. Patel and Frank Jordan


THE PUZZLE OF LIGANDS BINDING TO Corynebacterium ammoniagenes FAD SYNTHETASE

Susana Frago, Adrián Velázquez-Campoy and Milagros Medina


Metal binding

Biochemical and spectroscopic studies of human melanotransferrin (MTf): Electron-paramagnetic resonance evidence for a difference between the iron-binding site of MTf and other transferrins

Sebastien Farnauda, Maryam Aminib, Chiara Rapisardab, Richard Cammackc, Tam Buic, Alex Draked, Robert W. Evansb, Yohan Suryo Rahmantoa and Des R. Richardson

The International Journal of Biochemistry & Cell Biology
Volume 40, Issue 12, 2008, Pages 2739-2745

Almost all of John Viles Chirascan papers involve using the Chirascan to study binding of various metals to prion proteins. Among a number of papers:

Fragment length influences affinity for Cu2+ and Ni2+ binding to His96 or His111 of the prion protein and spectroscopic evidence for a multiple histidine binding only at low pH

Mark Klewpatinond and John H. Viles


Also include the diazepam/ibuprofen binding.

Deconvoluting the Cu2+ Binding Modes of Full-length Prion Protein.

Mark Klewpatinond, Paul Davies, Suzanne Bowen, David R. Brown, and John H. Viles.