Measuring metallodrug-peptide/protein interaction by speciation analysis

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Determination of metal-biomolecule association in biological applications is one of the most challenging tasks of speciation analysis. Measuring these interactions on different levels of complexity (1) in experiments with selected proteins or other relevant biomolecules and (2) attempting comprehensive mapping of adducts in-vivo is of crucial importance in many research fields as e.g. bioinorganic chemistry and biomedicine. The capabilities and limitations of the complementary use of both elemental and molecular mass spectrometry in these specific applications will be presented.