

Dinorah: Thank you for implementing the CYTED project and for receiving us !

Information for
RED IBEROAMERICANA DE INVESTIGACIÓN Y DESARROLLO DE FÁRMACOS BASADOS EN COMPUESTOS METÁLICOS

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COMPLEXO - CQE

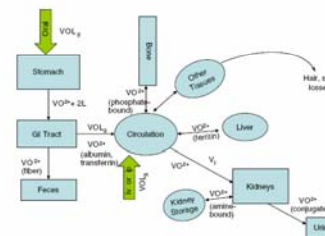
Experience with metal compounds:

- Vanadium
- Ruthenium
- Copper
- Nickel
- Zinc
- Rhenium

Prospective therapeutic applications of vanadium compounds

Diabetes
Cancer Treatment
HIV
Herpes
Tuberculosis
Amoebiasis
Chagas disease

Bioavailability
Importance of circulation



Do ligands improve bioavailability ?

INTERACTION OF VANADIUM COMPLEXES WITH HUMAN SERUM TRANSFERRIN AND ALBUMIN

Techniques used for the studies:

Ultrafiltration
HPLC/ICP-MS

Spectroscopic techniques

- Circular dichroism
- EPR
- Fluorescence
- NMR

Circular Dichroism is a particularly useful technique:

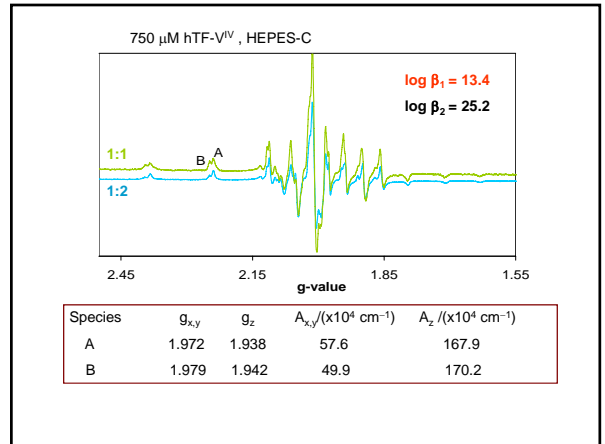
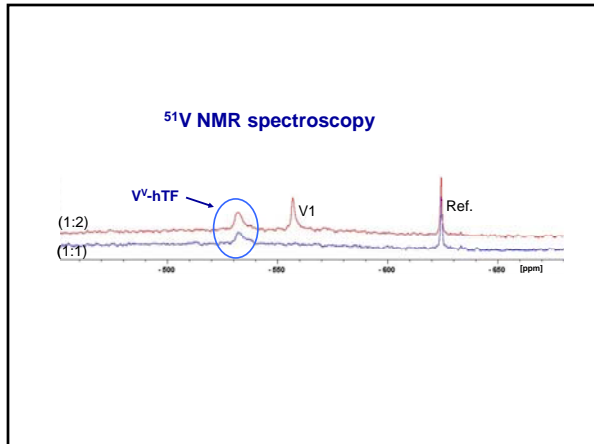
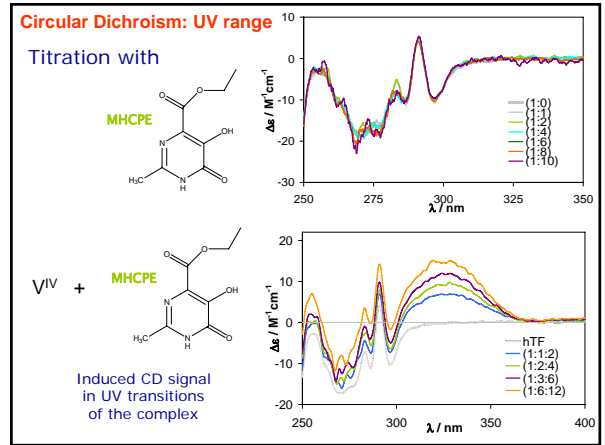
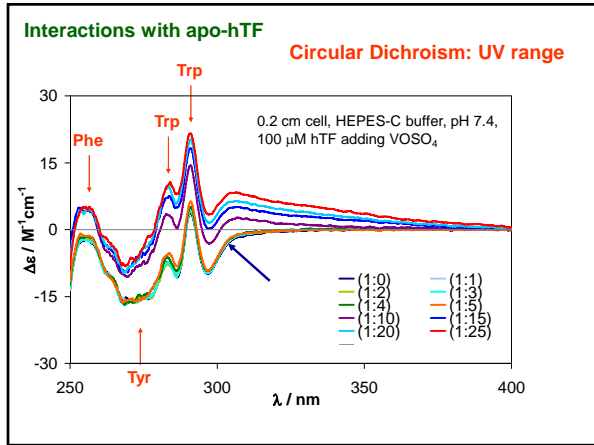
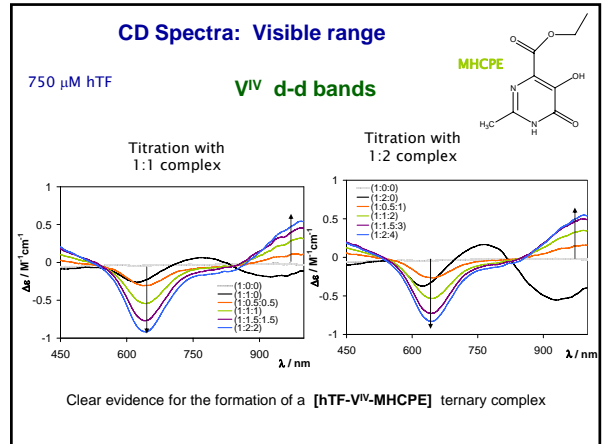
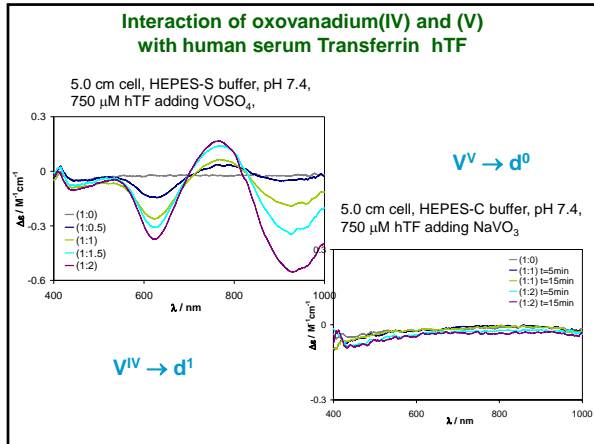
- UV range
- Vis range

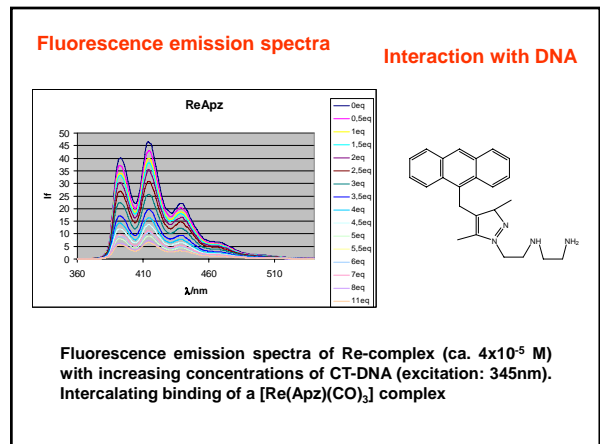
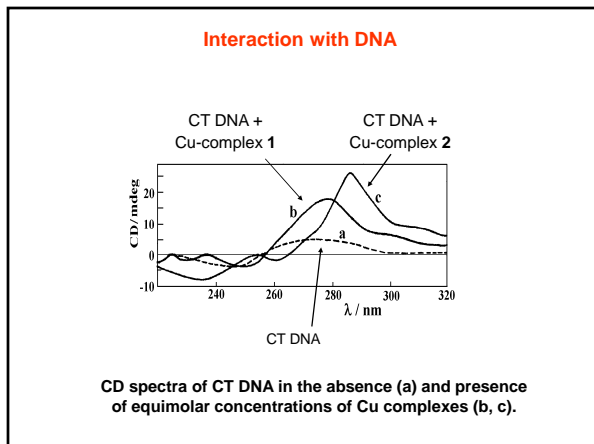
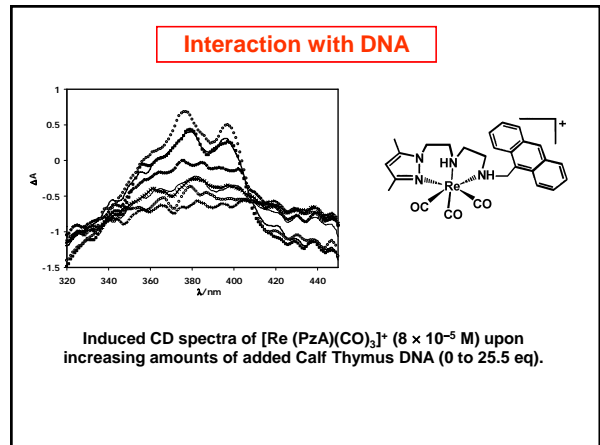
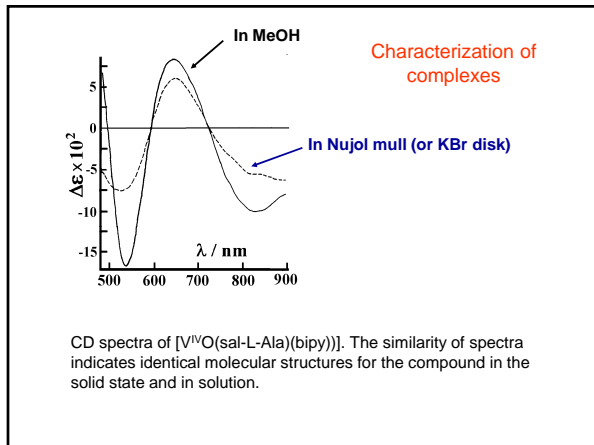
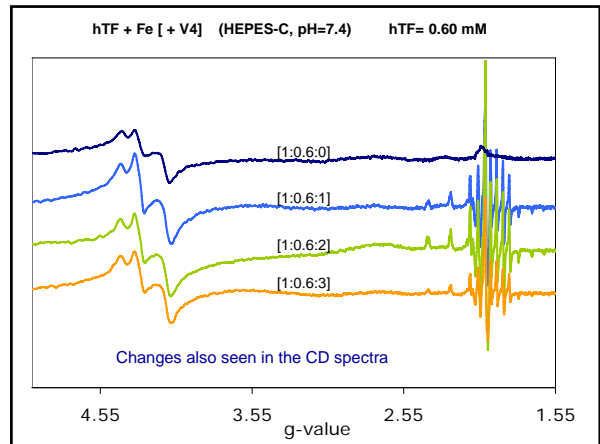
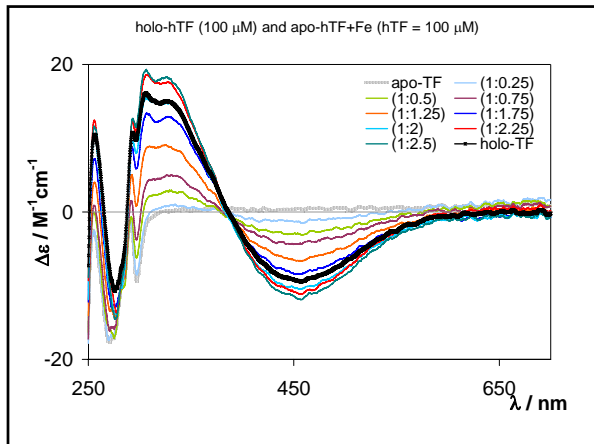
CD (Vis range)

Special 5.0 cm cell

ca. 400 μ L vs. ca. 10 000 μ L

Binding constants may be obtained





- Circular dichroism
- EPR
- Fluorescence
- NMR

I hope our experience is suitable to
integrate in successful
collaborative work within CYTED