Past/recent work from Addison Lab:

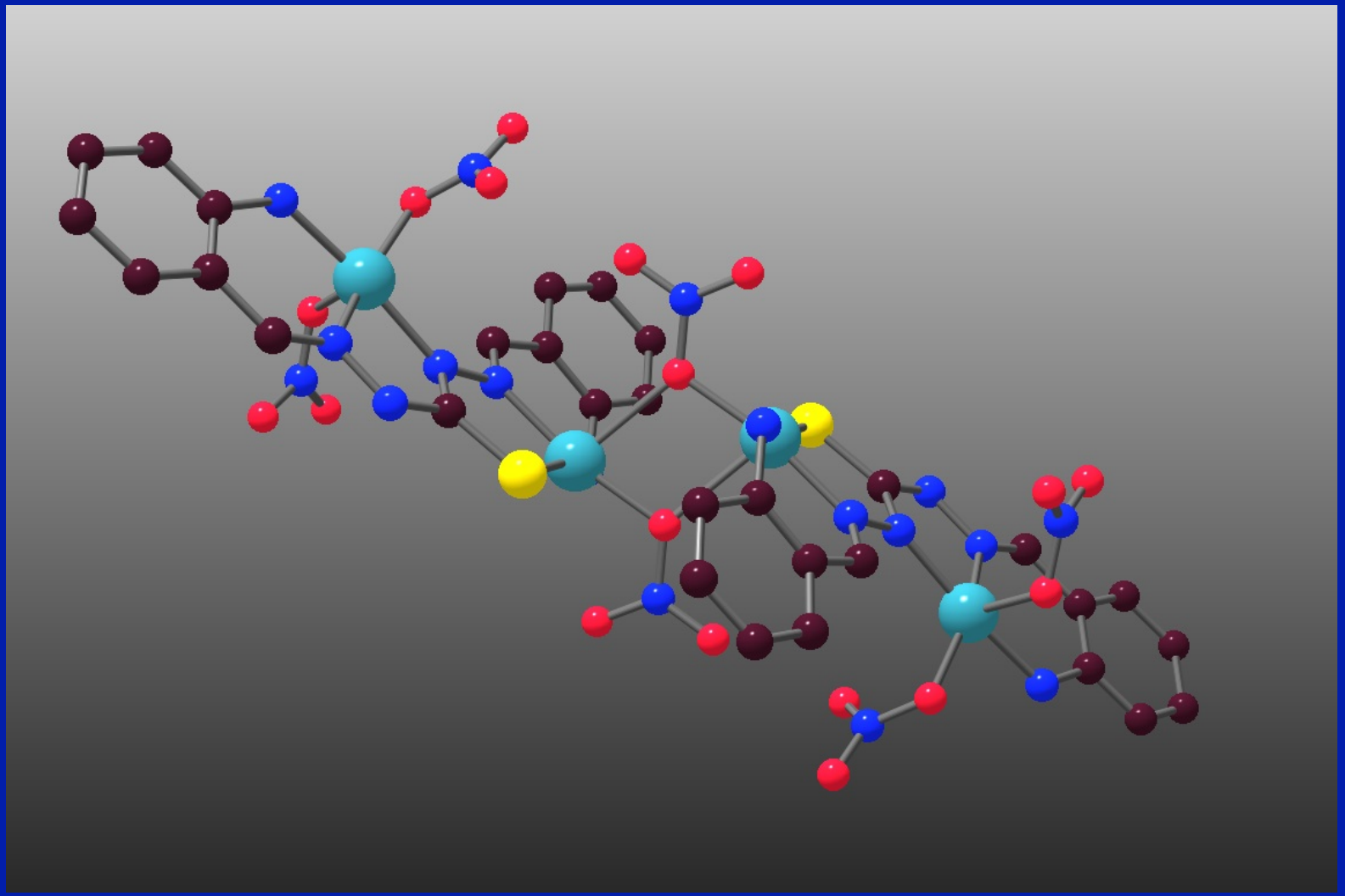
- Metalloprotein models, using symmetry reduction *via* non-tetragonal donor sets, using tripod ligands, steric hindrances.

- Oligonuclear systems for spin-spin interactions in magnetic materials & multimetallic proteins

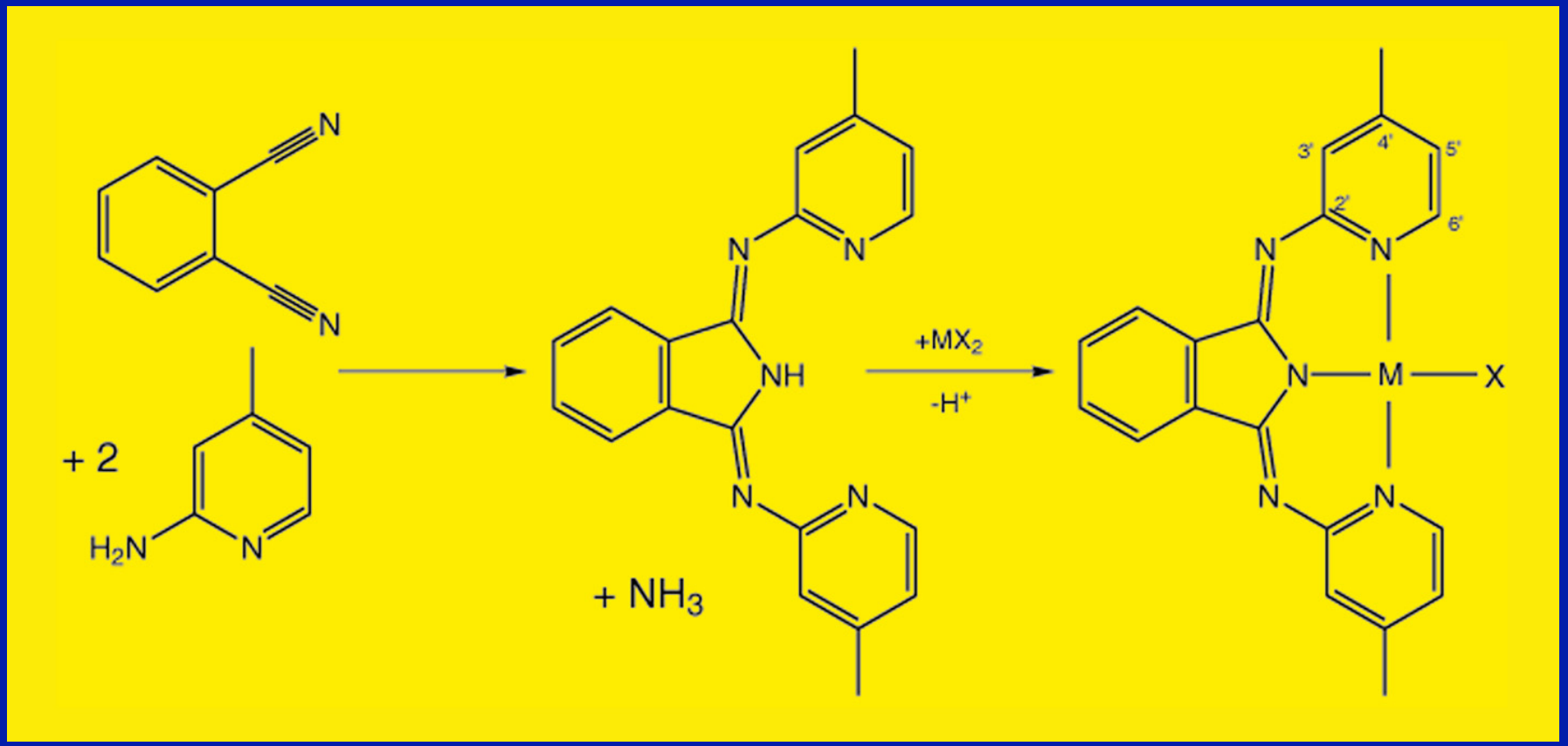
↓

Metal-organic frameworks (MOFs)

- Ni-, Cu- & Ru-diimines as luminophores, e-transfer reagents, chirality, spontaneous resolution.



Tetranuclear copper(II), with magnetic coupling, Cu---Cu - magnetism .....

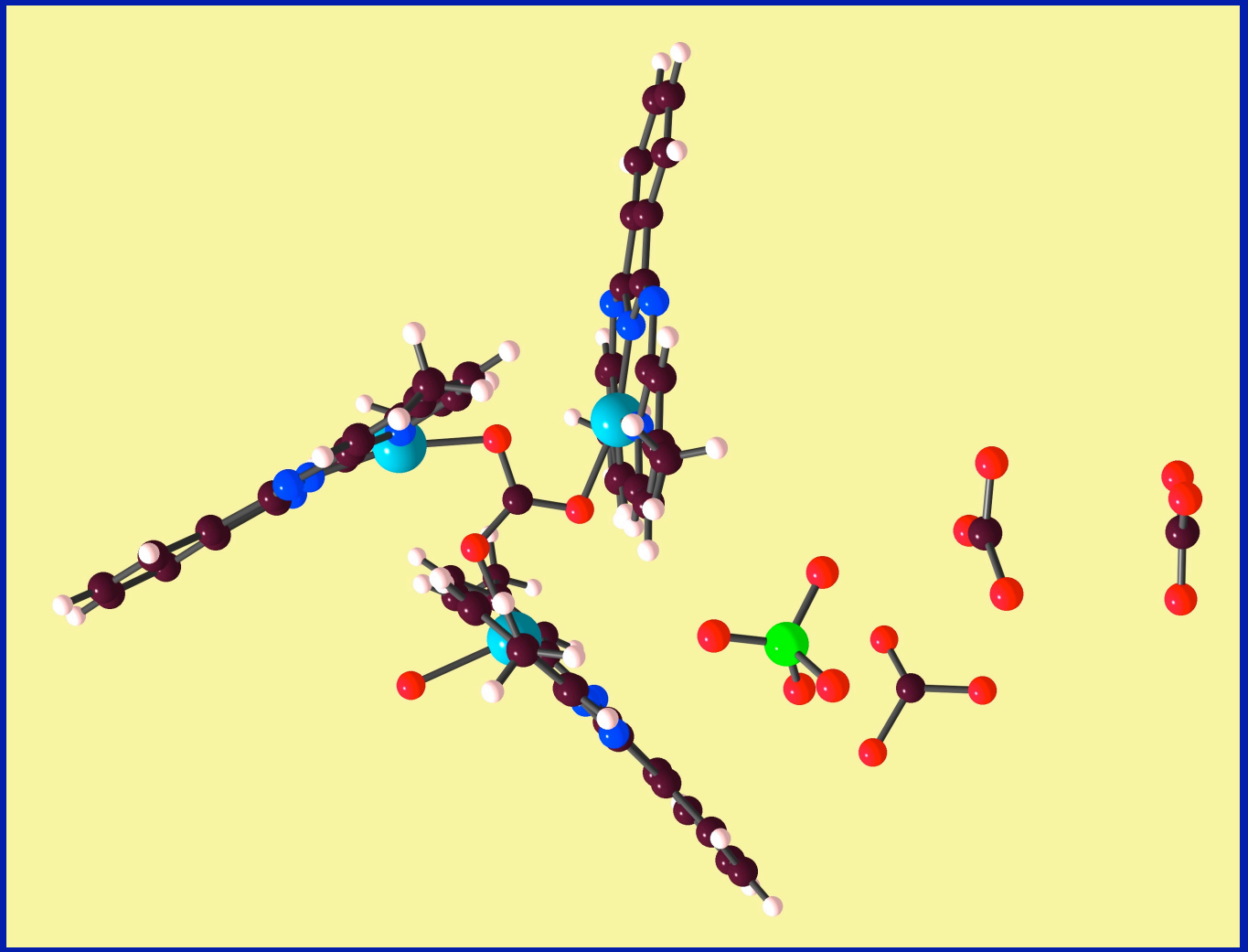


Bis(pyridylimino)isoindolines:

Planar, monoanionic, N3-tridentate, strong-field.

Also 4' -*n*propyl, add steric CH_3' s at 6' -positions.

Elvidge/Linstead (1952); Gagné/Siegl (1977); Addison & Burke (1983); Crutchley (1993); Wicholas, Deutschländer (2000' s)



Copper isoindolinate - fixes CO_2 in molecule and in the supramolecular lattice

CHEMSUSCHEM

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Ce^{IV}- and Light-Driven Water Oxidation by $[Ru(terpy)(pic)_3]^{2+}$ Analogues: Catalytic and Mechanistic Studies

Lele Duan,[a] Yunhua Xu,[a] Lianpeng Tong,[a] and Licheng Sun*[a, b]

J|A|C|S ARTICLES

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Mechanism of Water Oxidation by Single-Site Ruthenium Complex Catalysts

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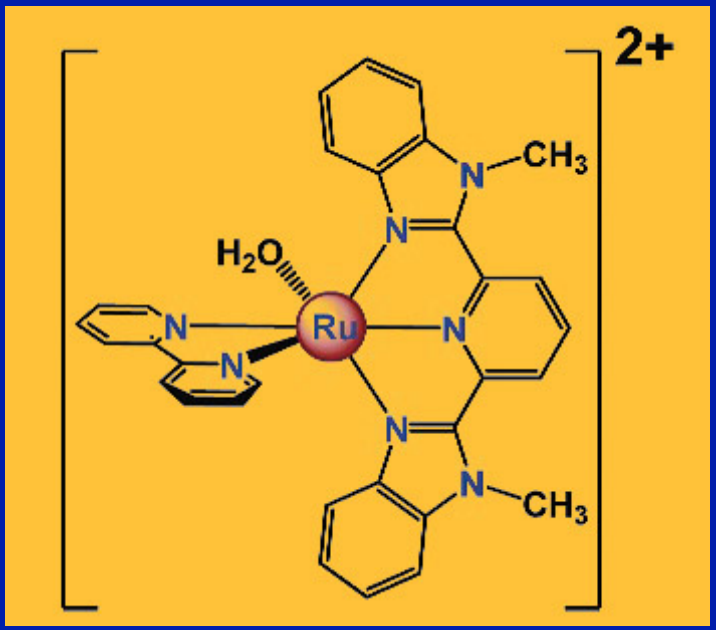
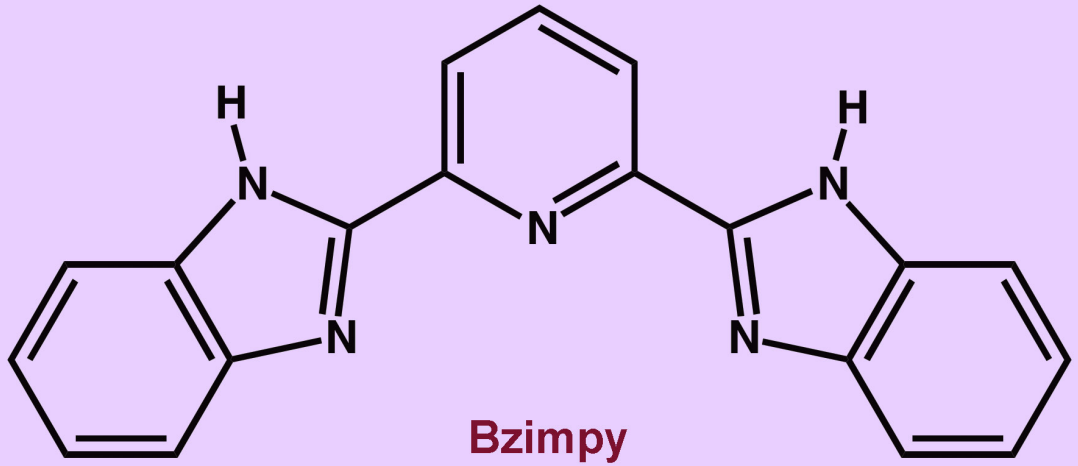
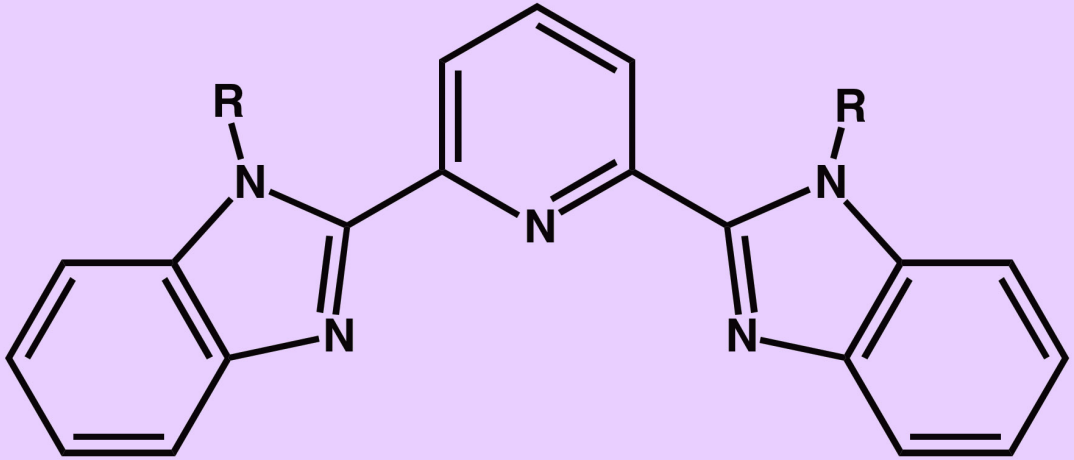
Department of Chemistry, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina 27599, and Chemistry Department, Brookhaven National Laboratory, Upton, New York 11973-5000

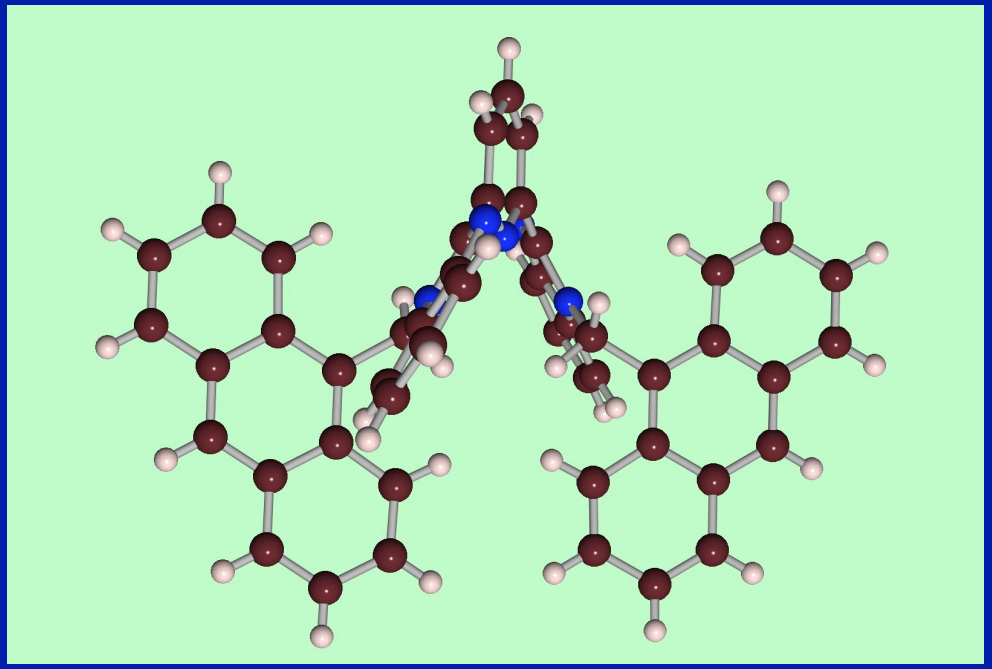




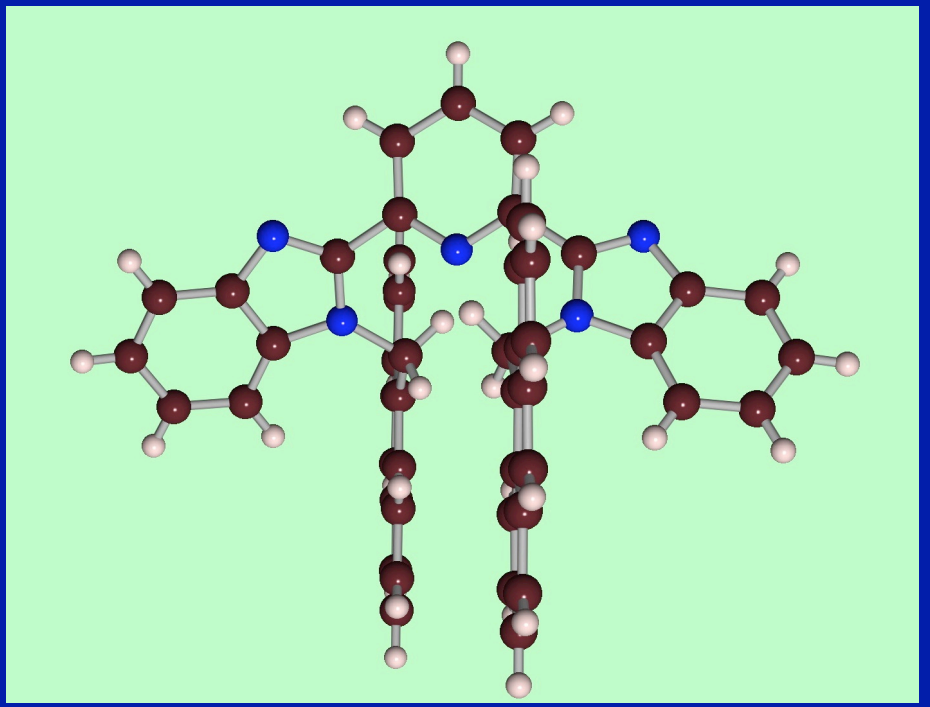
Bzimpy



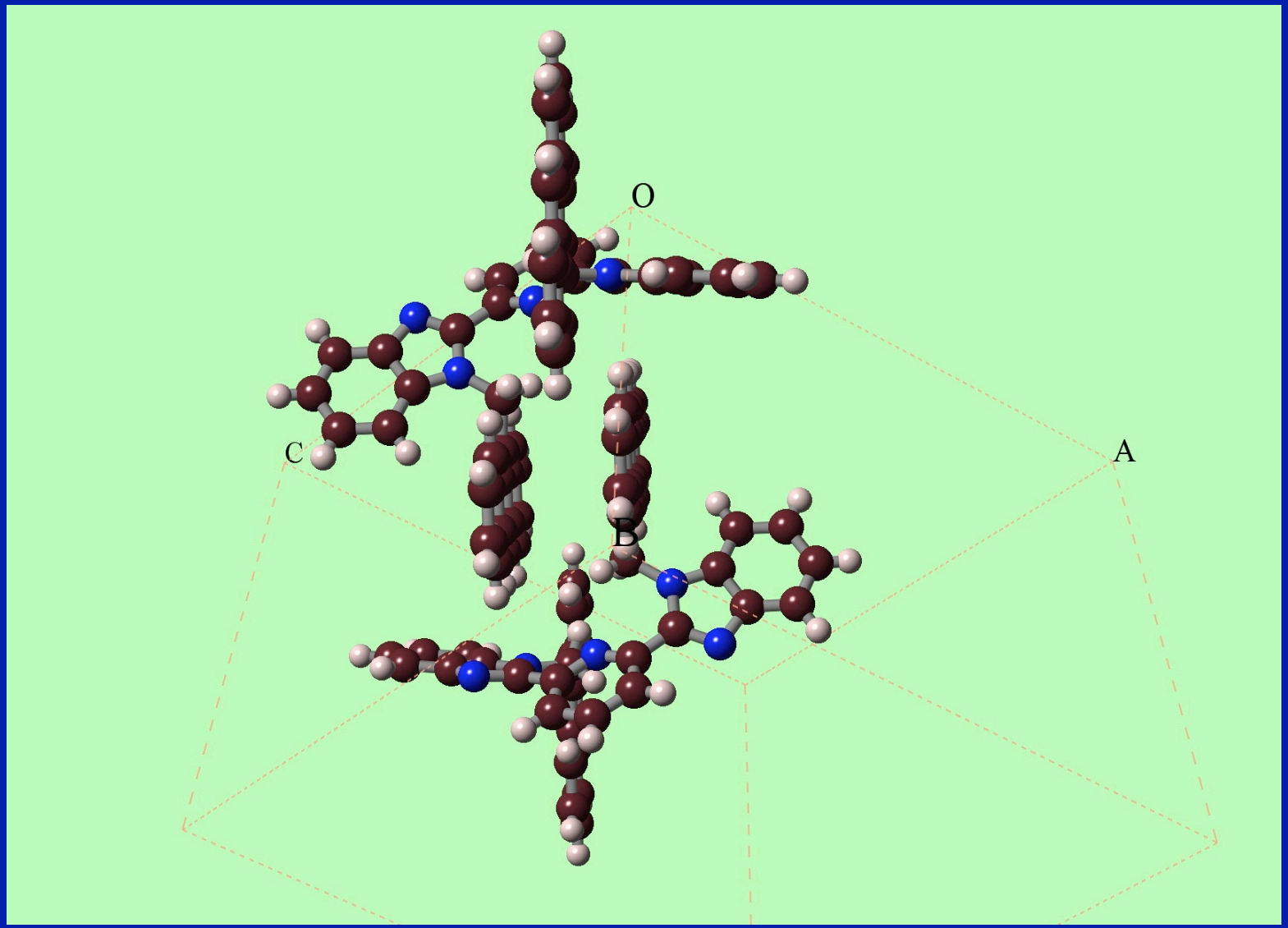
***N*-Substituted Bzimpys - choose something nice ...**



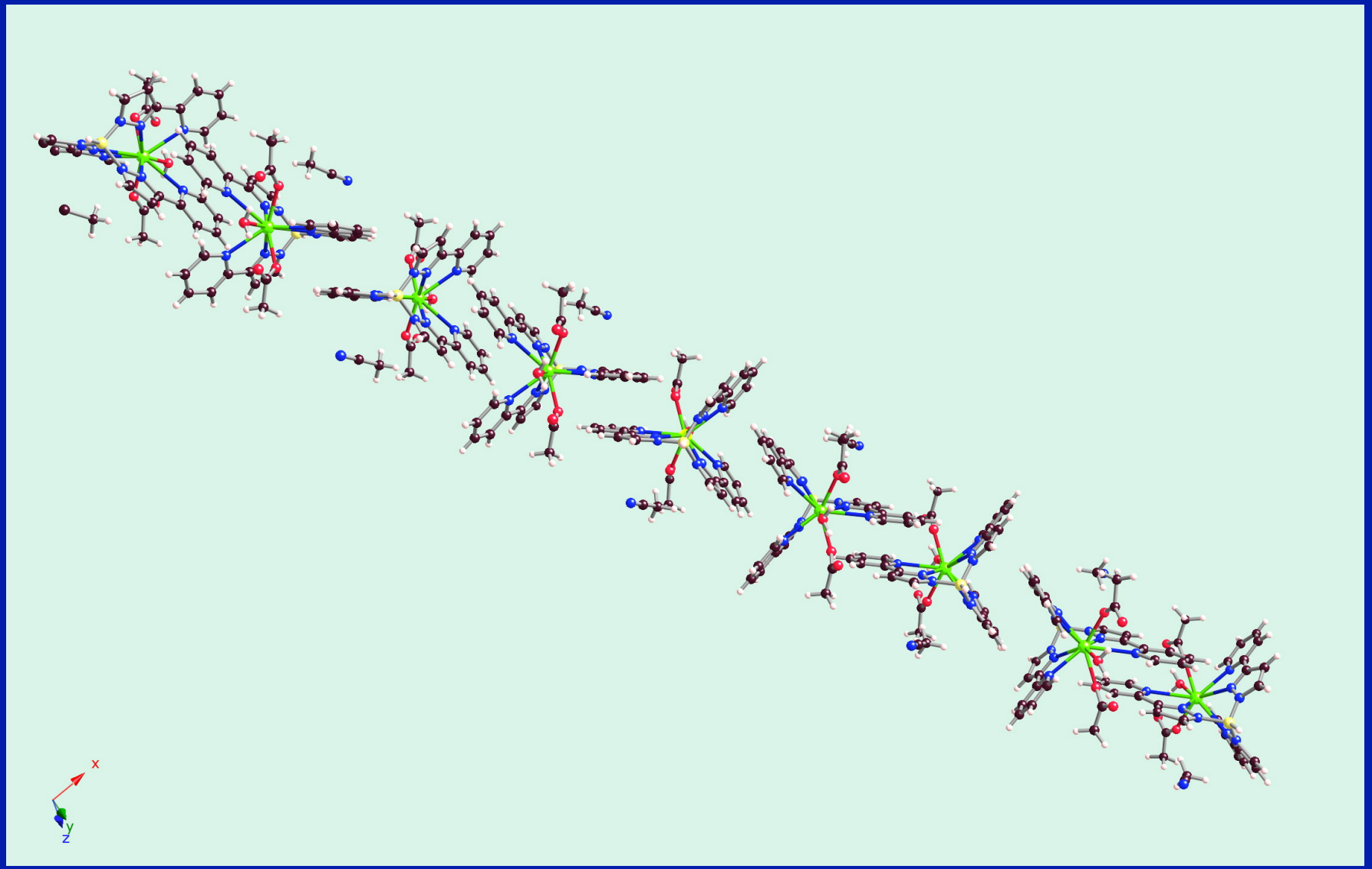
Anthracenylmethyls work ...



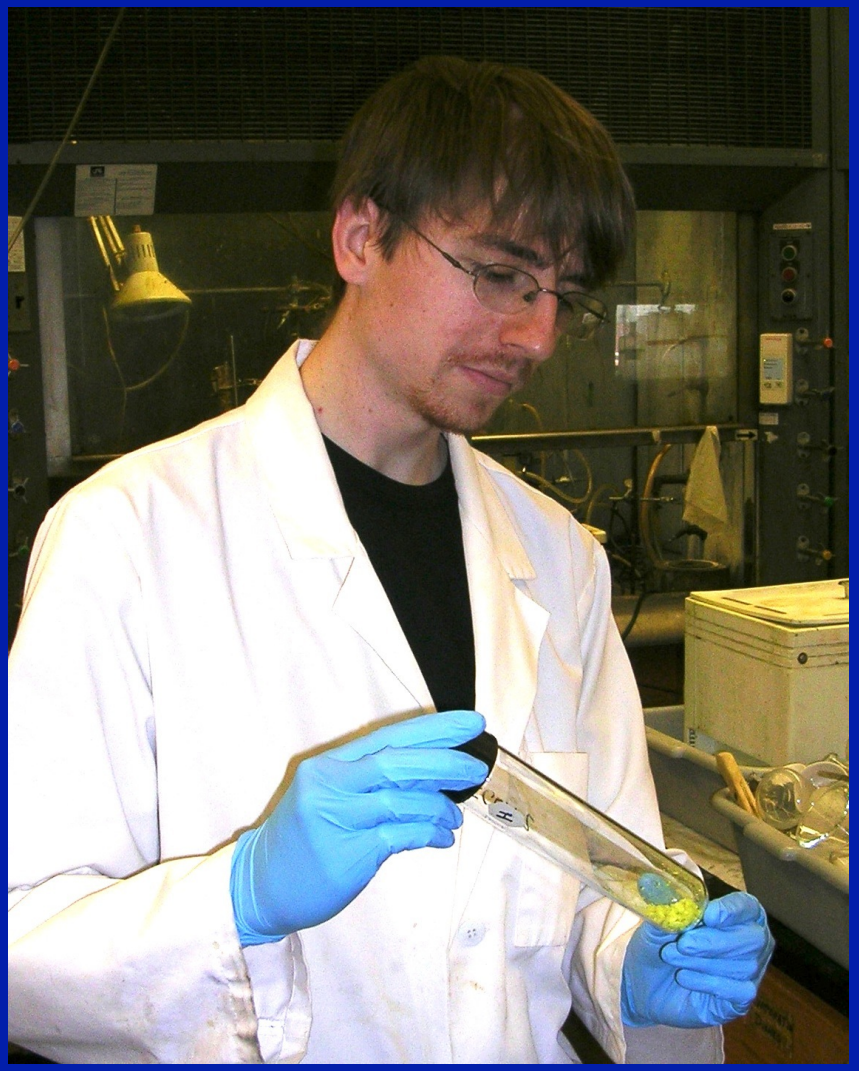
…. with Bzimpy unit.

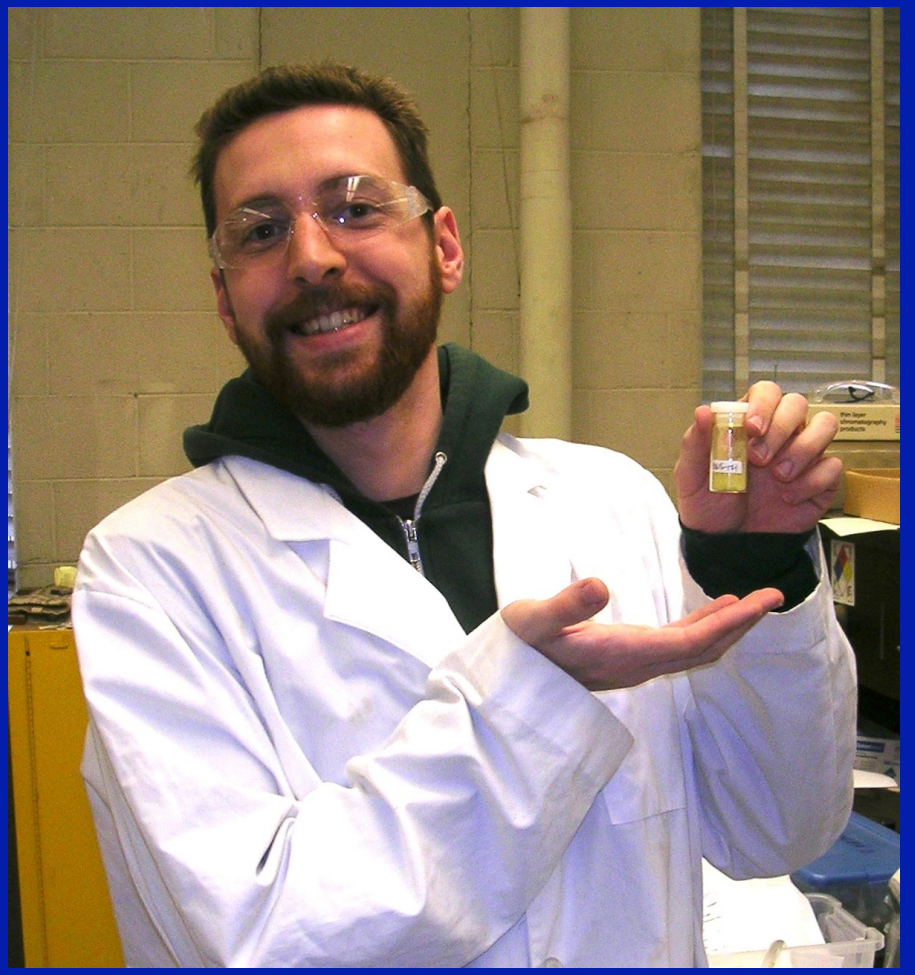


π-Stacked molecules



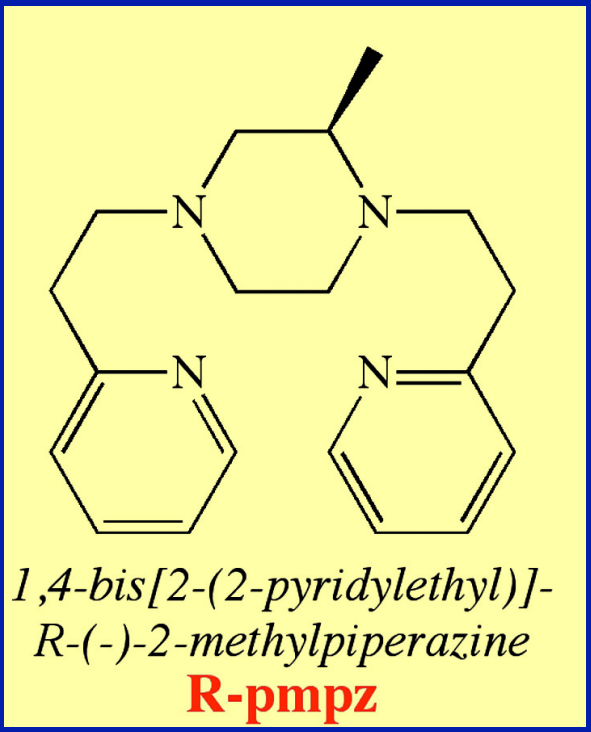
Luminescent, infinitely π-stacked terbium superantenna





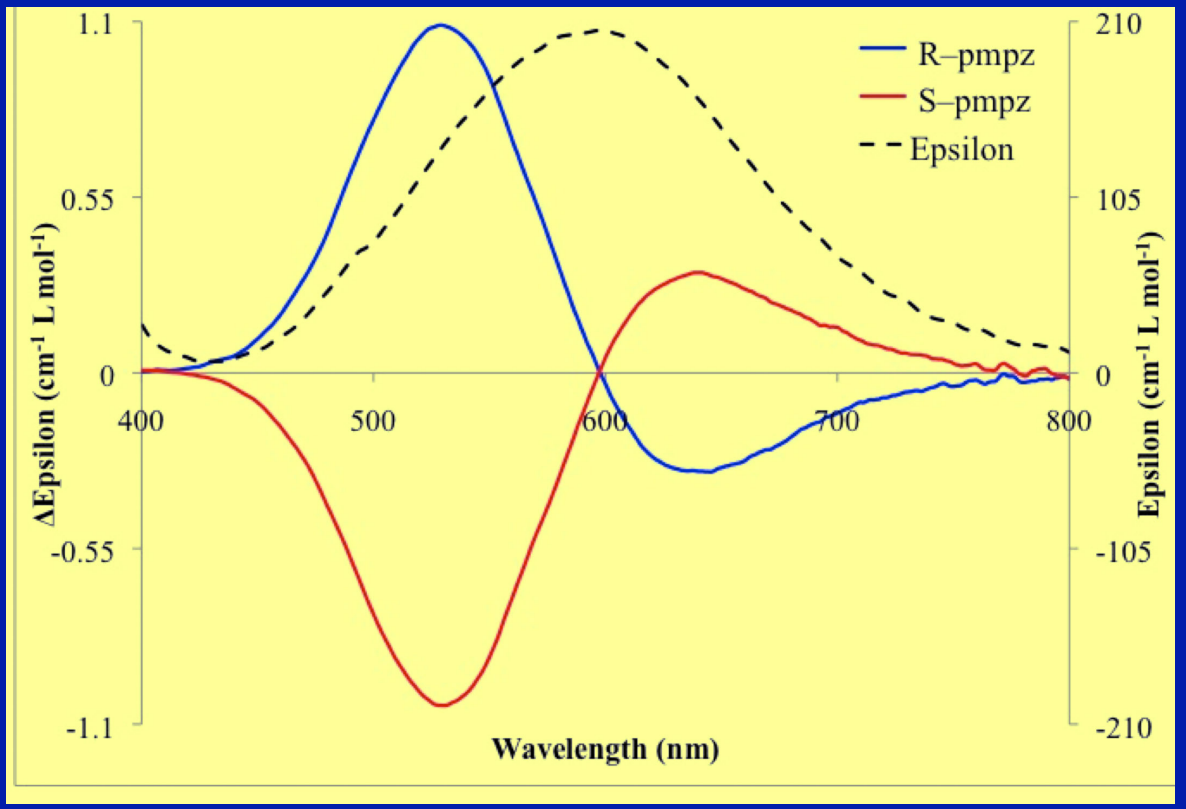
Current denizens– Eric & Adam - dressed for the job !

Some lab rats, you might recognize .....

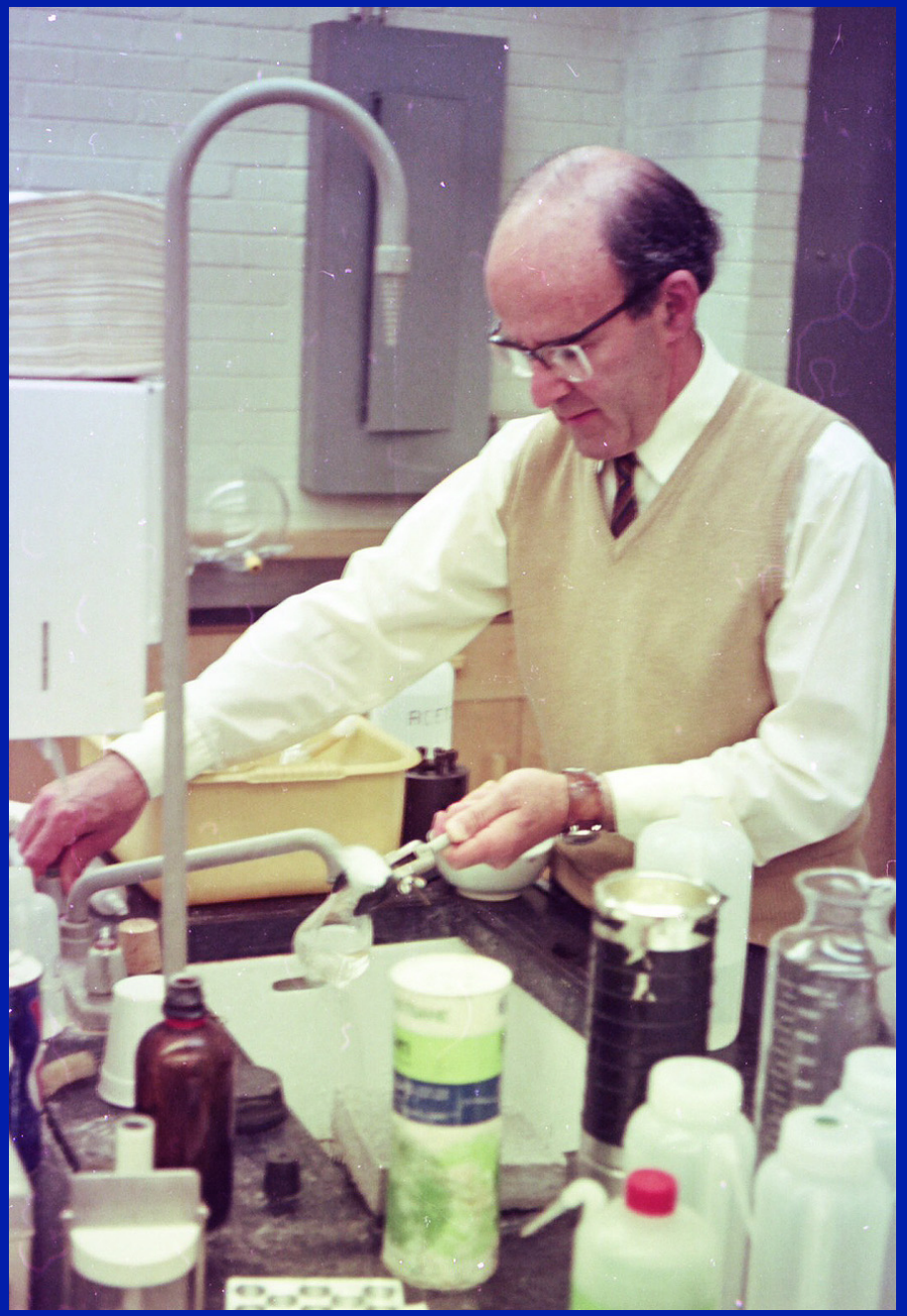


1,4-bis[2-(2-pyridylethyl)]-R-(-)-2-methylpiperazine

R-pmpz



Near-UV/Vis absorption & CD of chiral Cu(II) complex

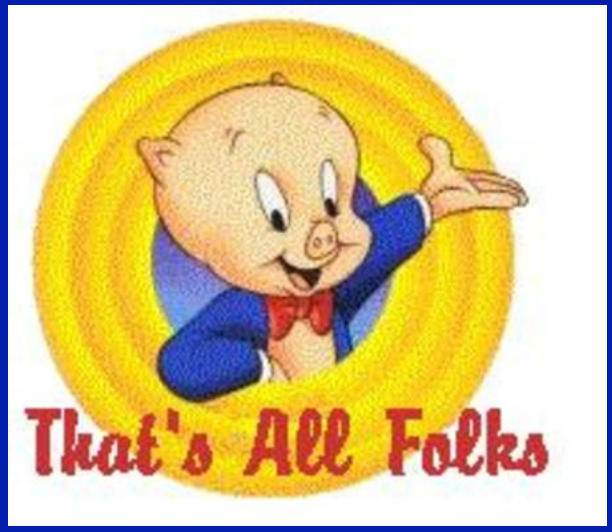


Max in my Lab.

Glasses? √

Lab coat? X

One of his students became known ...


That's All Folks