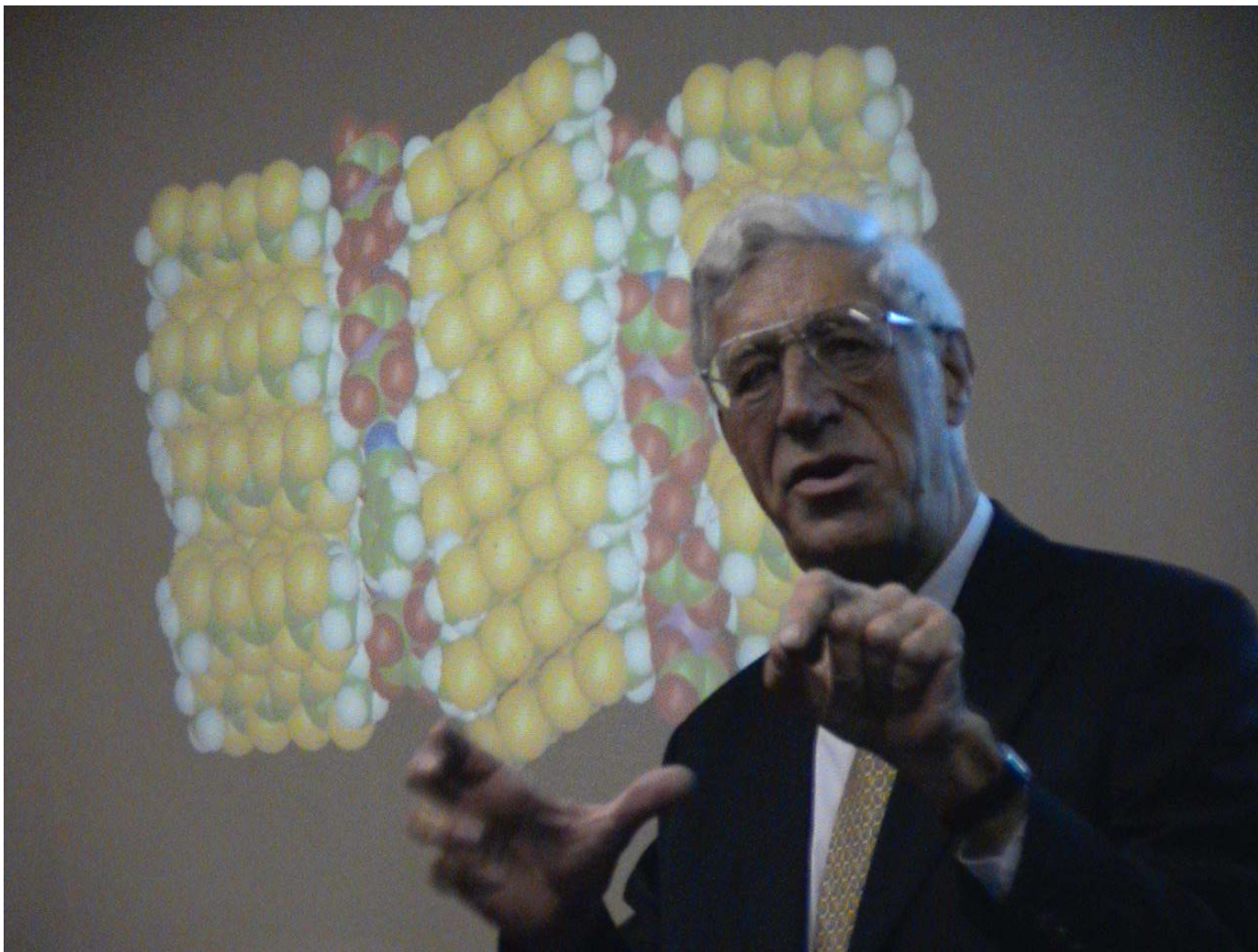


The possibilities are endless
Just a glimpse
to other

multifunctional
materials

Conducting Magnets ...



Peter Day, FRS, Fullerian Professor of Chemistry, the Royal Institution, 2003. Photograph MV

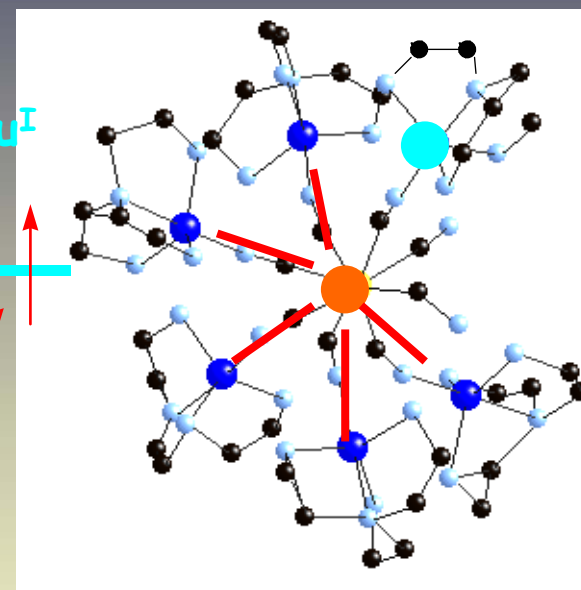
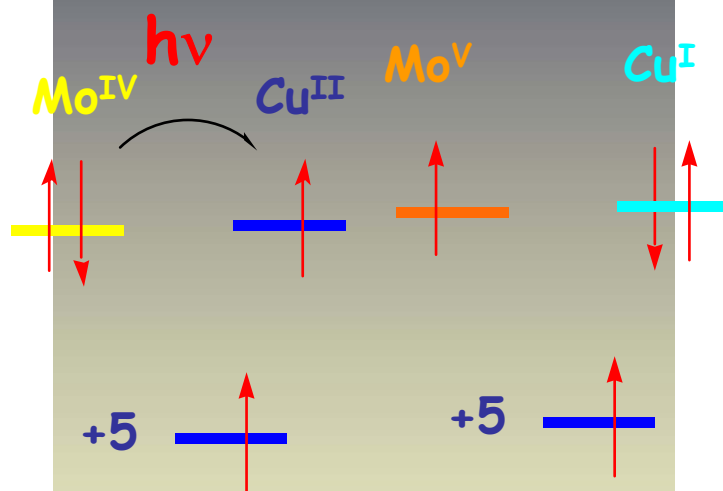
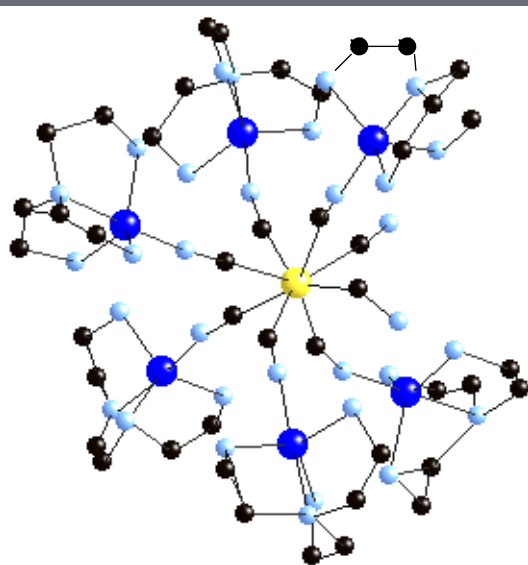
Playing with light ...

Photomagnetism



J. Miró, Muro de Luna, Mural ceramics, UNESCO, Paris

Photo-induced electron transfer



$\text{Mo}^{\text{IV}}, d^2, S=0$

No exchange

6 isolated $S=1/2$

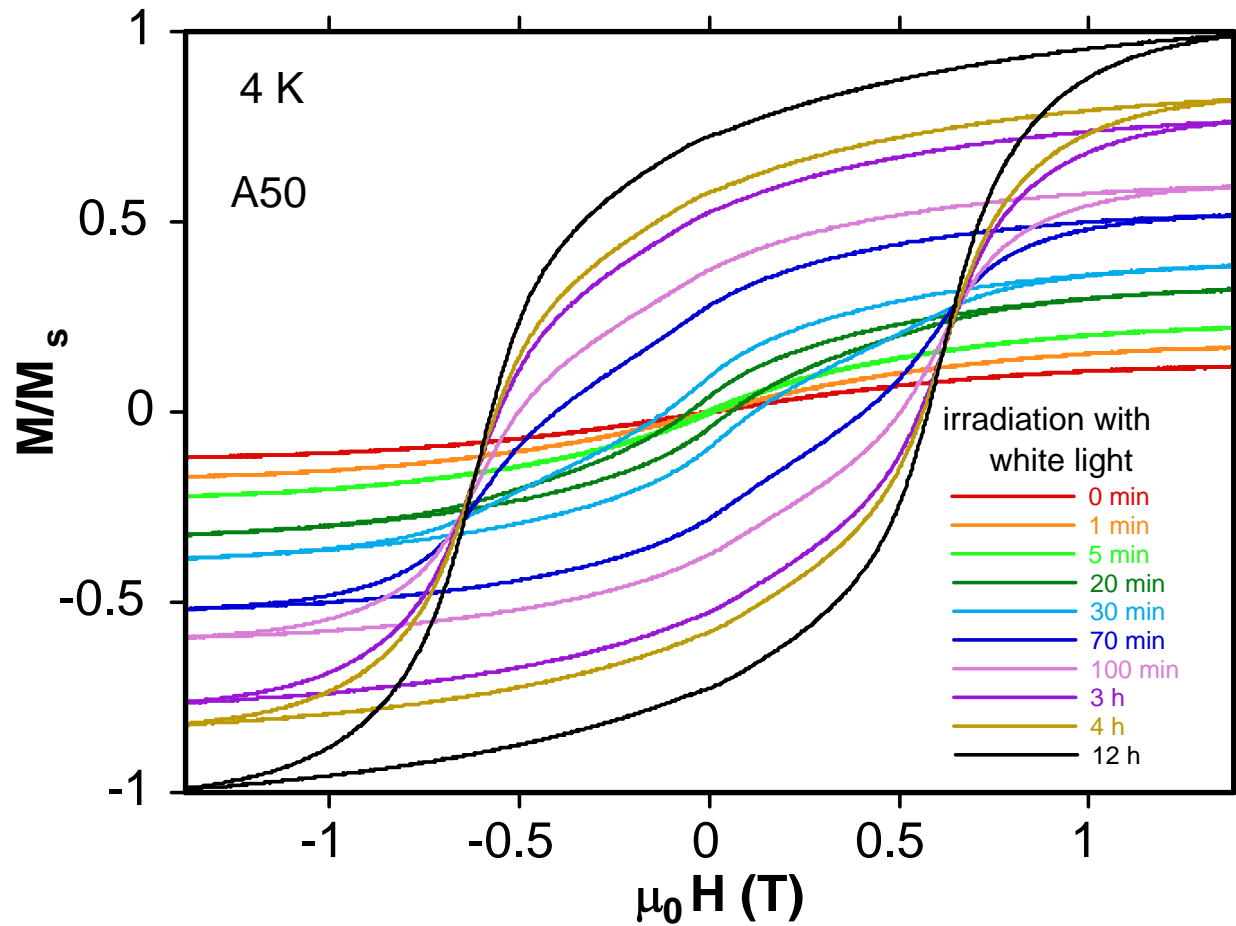


$\text{Mo}^{\text{V}}, d^1, S=1/2$

Ferro interaction ...

$S=3$

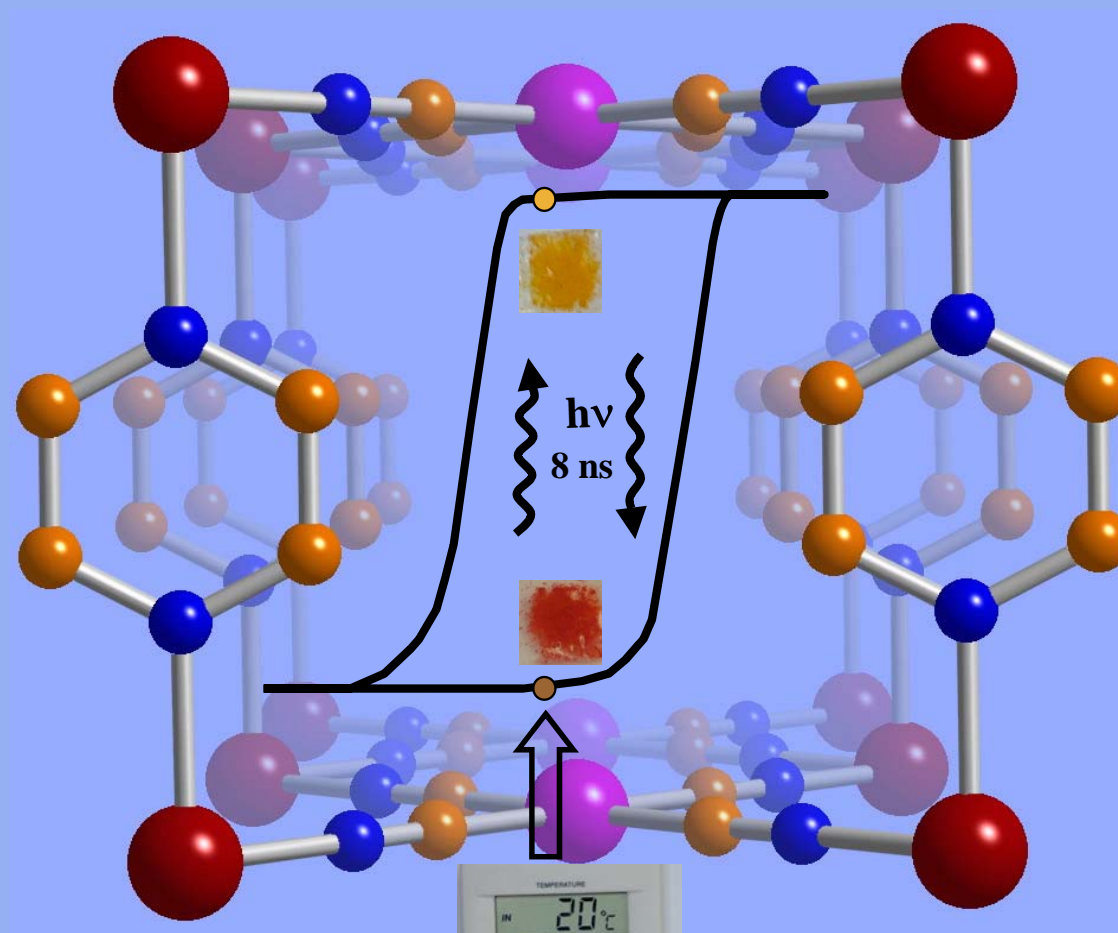
Work in progress : Magnetization of nanoparticles of **CoFe** analogues of Prussian Blue, microSQUID, 4 K, under irradiation



(A. Bleuzen, W. Werndorfer)

Photo-Induced Phase transition at room Temperature

One-Shot-Laser-Pulse-Induced Reversible Spin Transition in
 $\{\text{Fe}(\text{C}_4\text{H}_4\text{N}_2)[\text{Pt}(\text{CN})_4]\}$ at Room Temperature

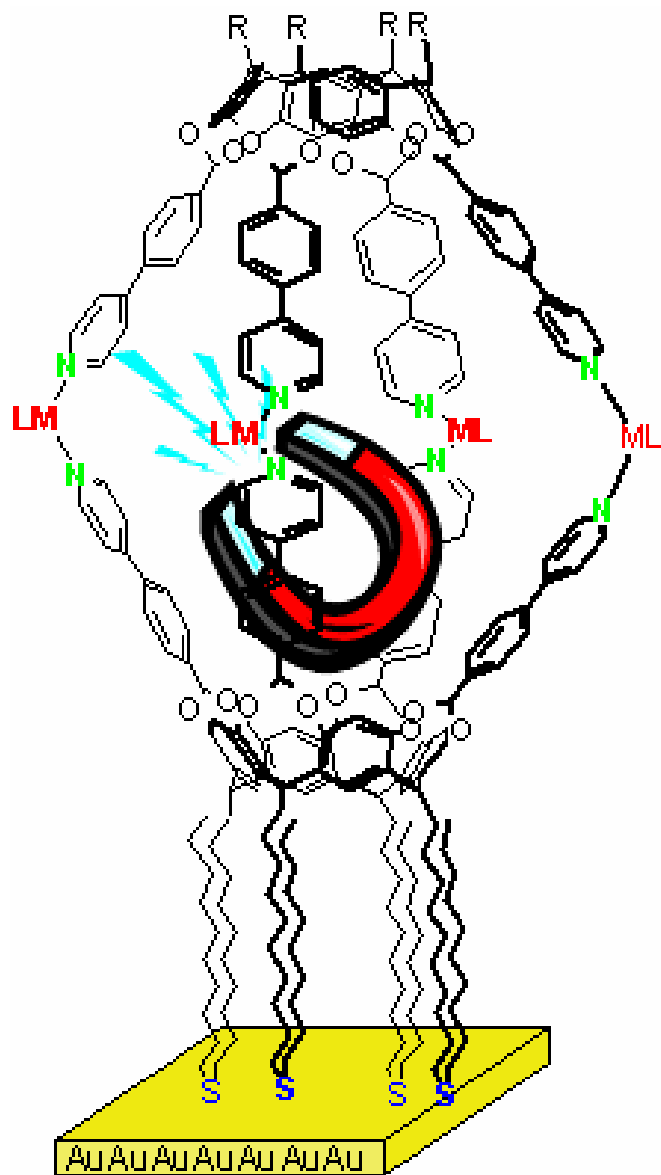


Angewandte Chemie, 2005 (VIP paper, Cover picture)
A. Bousseksou, et al., LCC Toulouse



M. Noyori, Hanoi, October 2003

*To day
the chemist is able
to synthesize
any molecule
at will*



6th PCRD, NOE
Network of excellence
Launching May 2005



Molecular Approach to
Nanomagnets and
Multifunctional Materials Net

Coordinated by Prof. D. Gatteschi, Florence

Pablo Picasso
Child with a dove, 1901
oil on canvas, 73x54 cm
Private collection
on loan to National Gallery

