

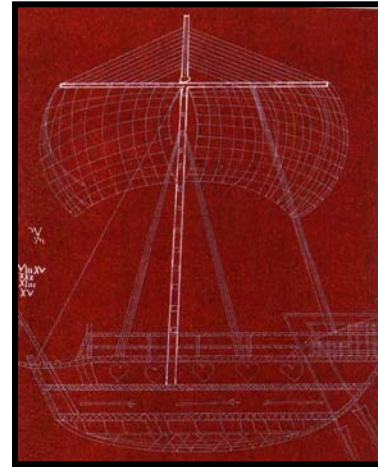
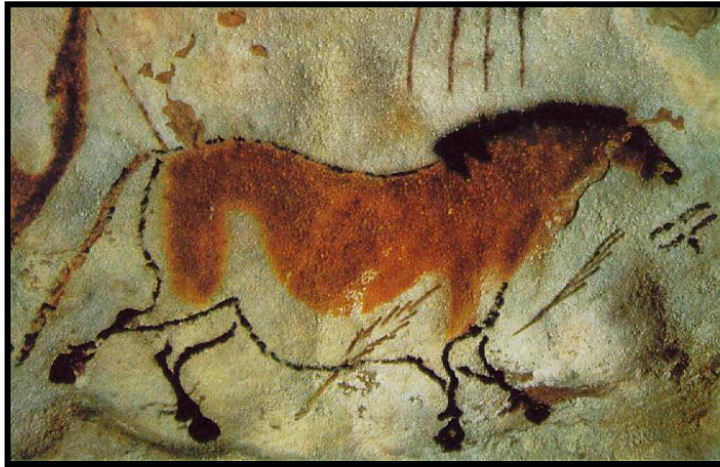
Les Ogres de Provence de l'extraction à la toile



Florence Boulc'h
et
Virginie Hornebecq



Contexte Historique



Paléolithique

Néolithique

Antiquité

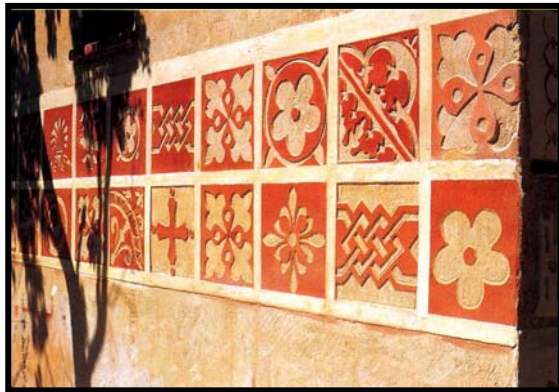
Moyen-Age

-100000

-10000

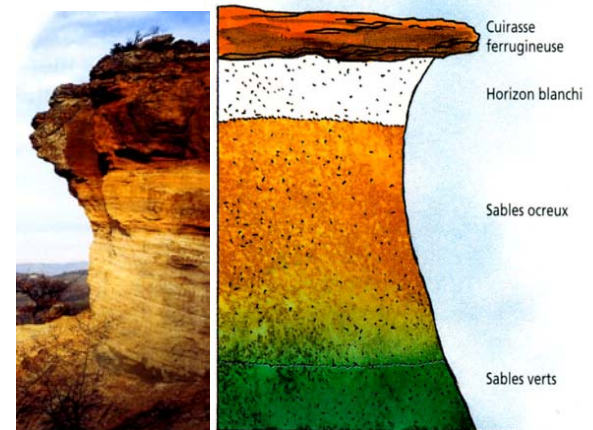
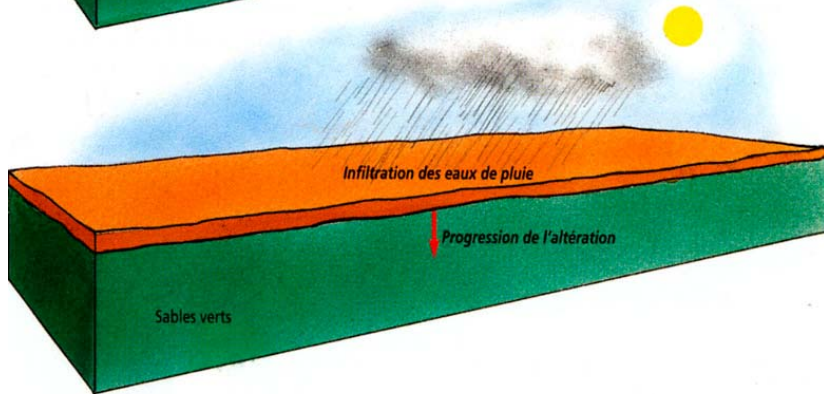
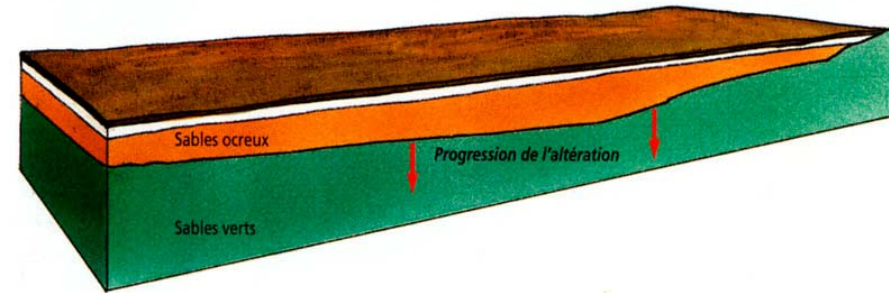
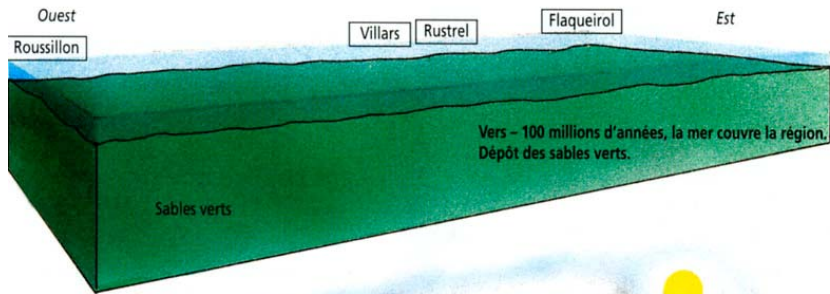
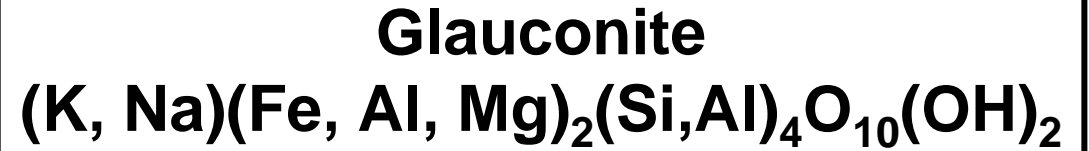
0

1500



Temps Modernes

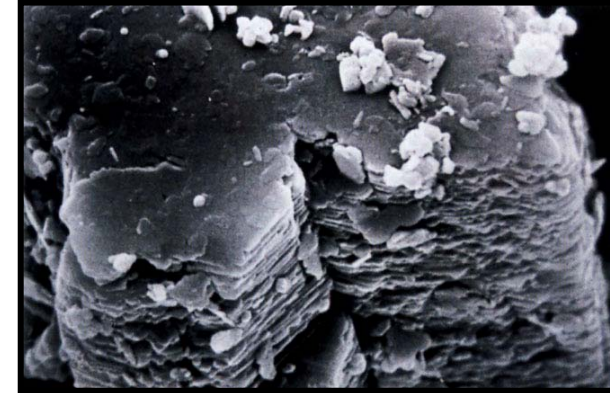
Contexte Géologique



Contexte Minéralogique

Ocre

grec *ôkhra*, de *ôkhros* « jaune »



- Goethite
- Kaolinite : $\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$
- Quartz : SiO_2

Goethite

Pigment jaune



Etude

Etude de l'influence de la température sur la couleur du pigment jaune

- Traitement thermique du pigment jaune à 300°C
- Caractérisation structurale par diffraction des rayons X
- Caractérisation colorimétrique par spectroscopie visible

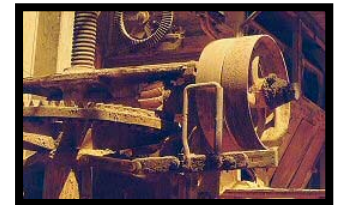


Préparation de peinture selon différentes techniques

Techniques à l'eau
Techniques à l'huile
Techniques à l'œuf

Réalisation d'une œuvre personnelle sur toile

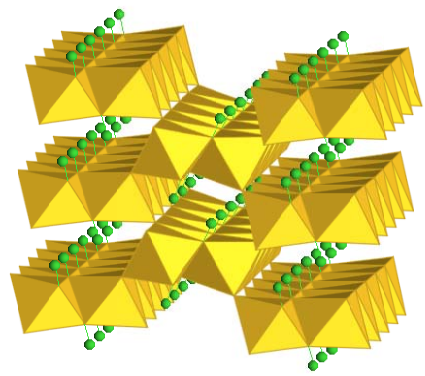
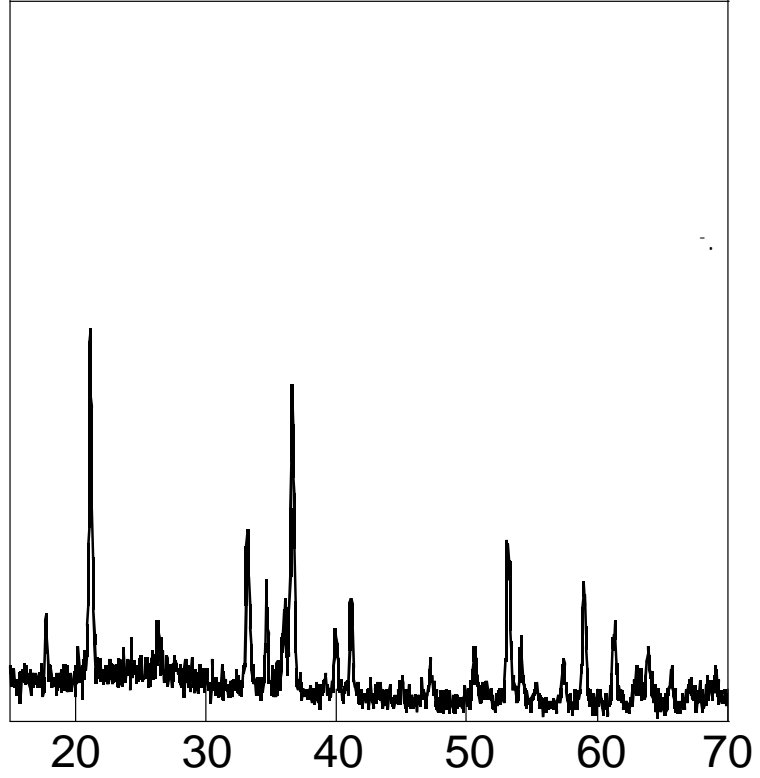
Visite de l'ancienne usine Mathieu à Roussillon



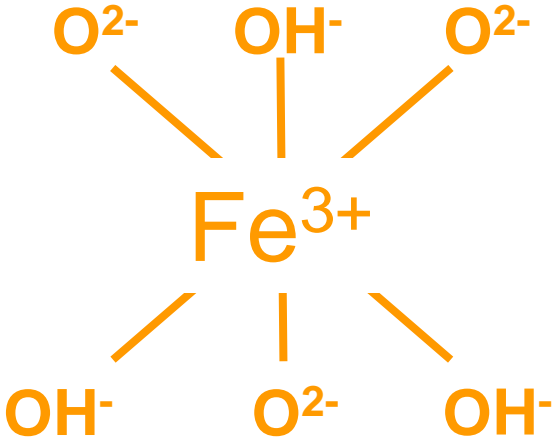
Analyse structurale du pigment jaune



Intensité (u. a.)



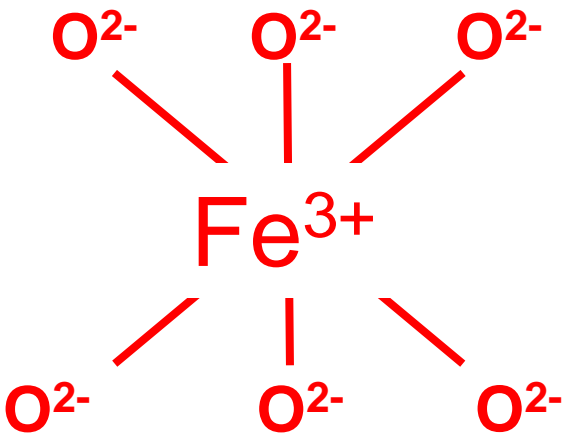
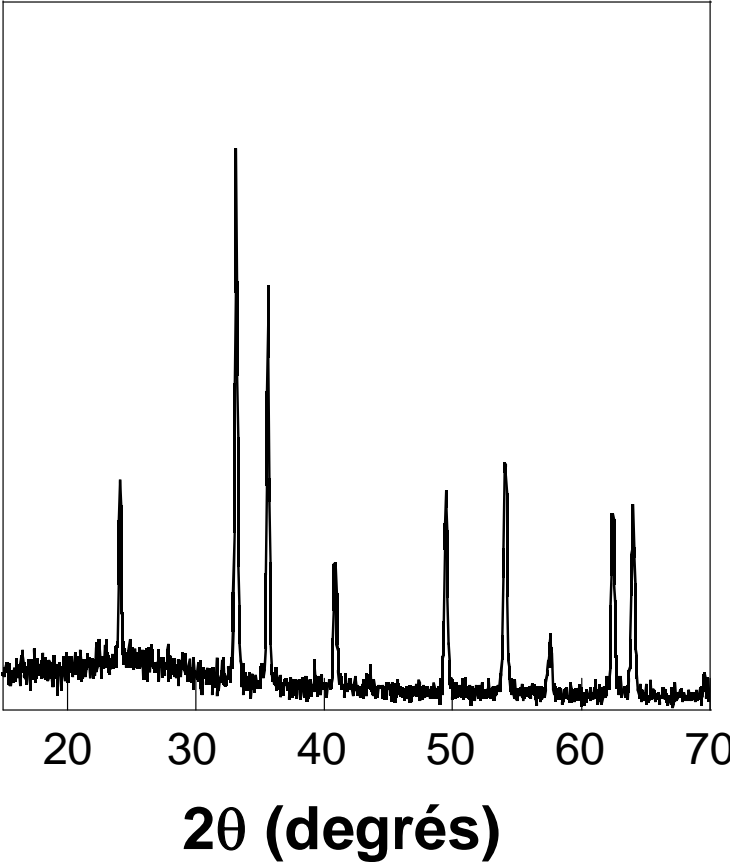
FeOOH
Oxy-hydroxyde de fer
ou goethite



Analyse structurale du pigment jaune à 300°C



Intensité (u. a.)



$\alpha - \text{Fe}_2\text{O}_3$
hématite

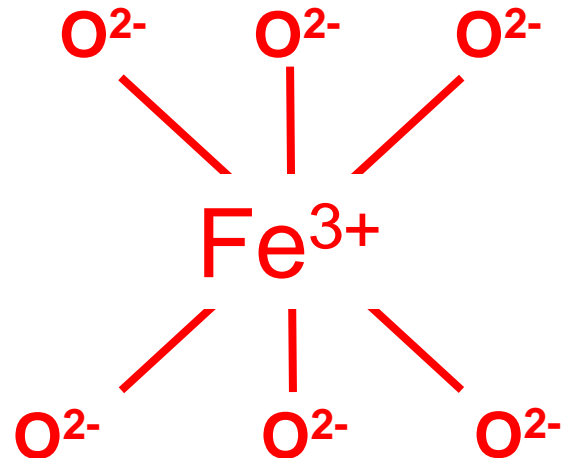
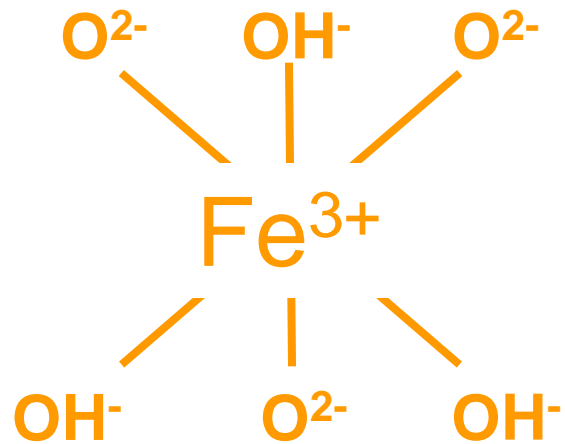
Discussion



300°C – 1000°C

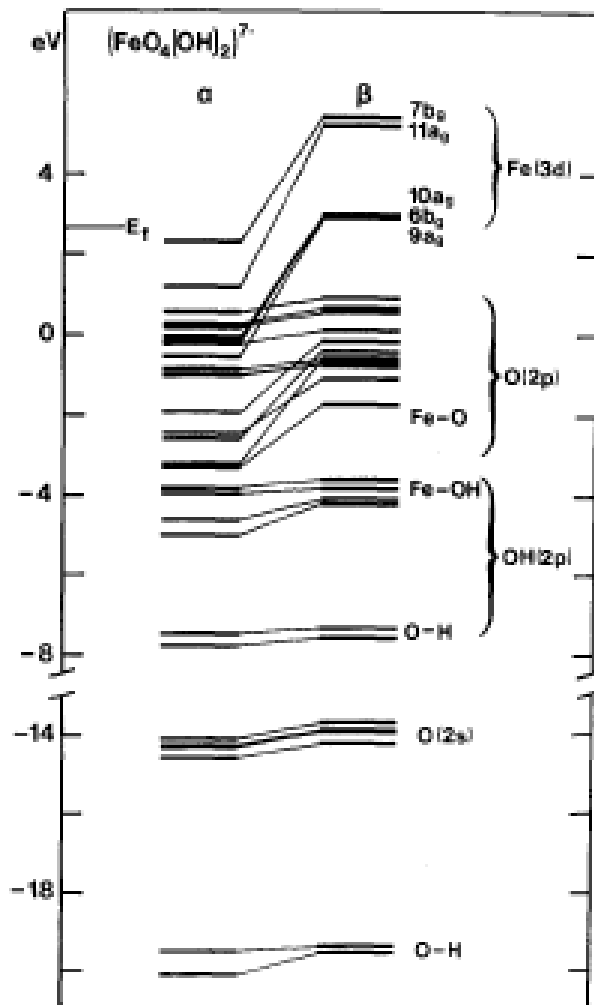
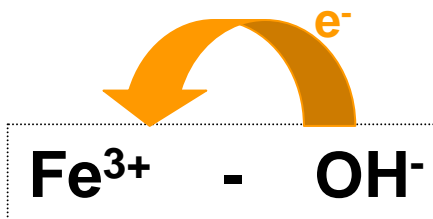
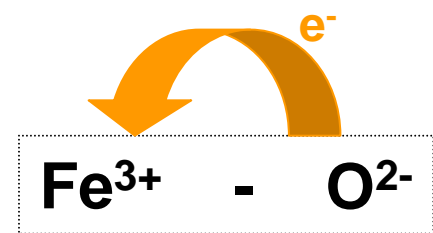
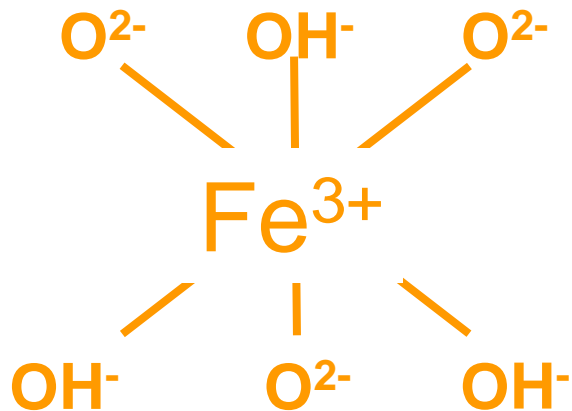


Altamira

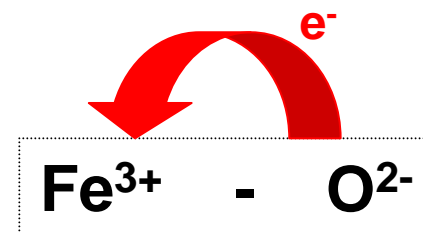
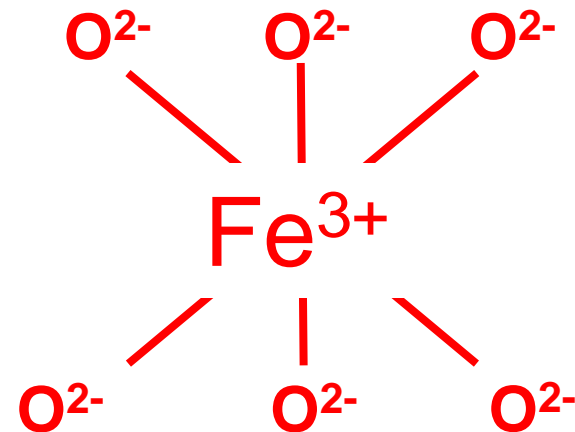


Transfert
de charge
Ligand - Métal

FeOOH
Goethite



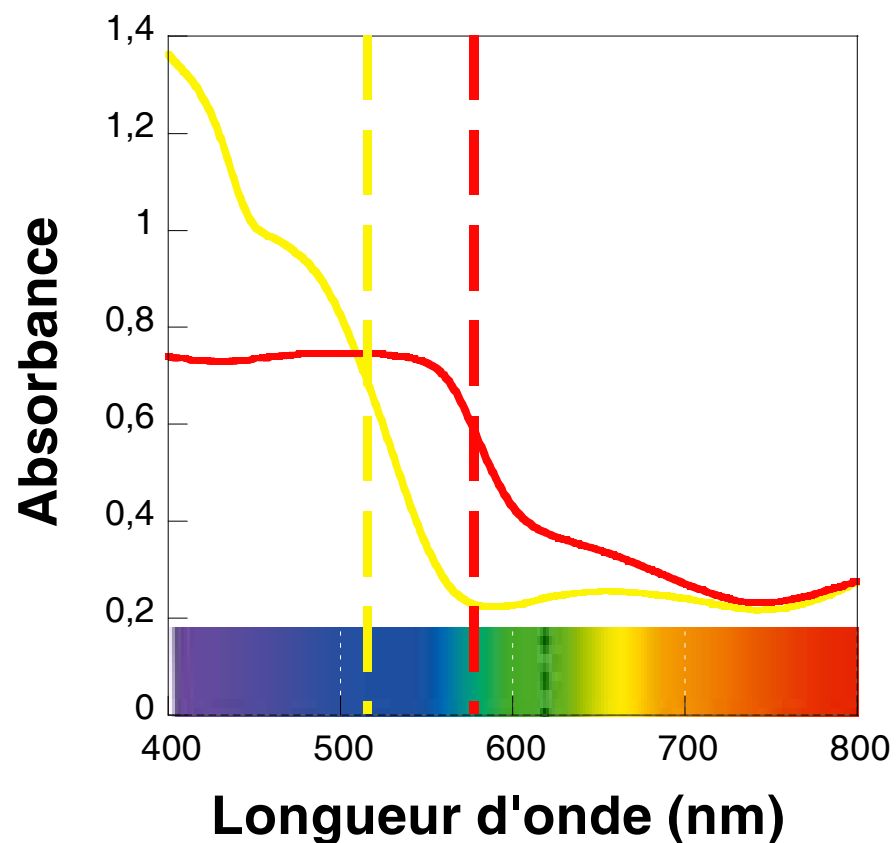
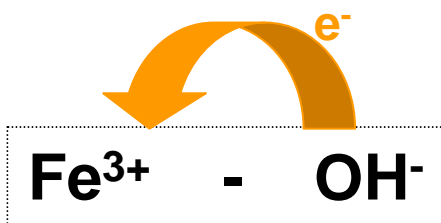
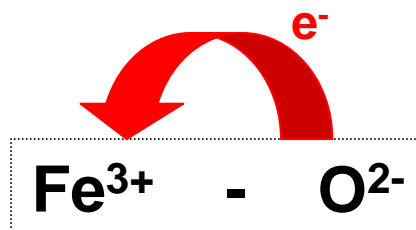
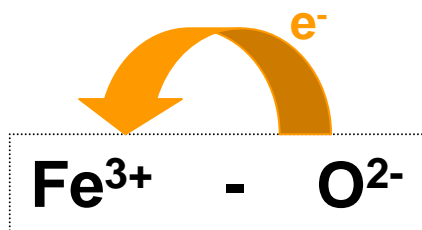
α - Fe_2O_3
Hématite



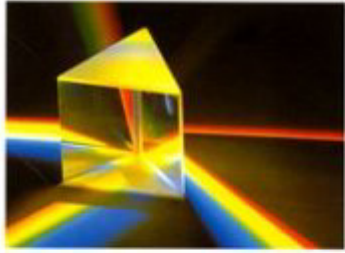
FeOOH
Goethite

α - Fe₂O₃
hématite

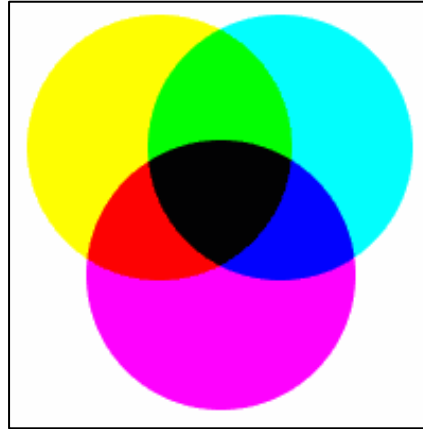
Transfert
de charge
Ligand - Métal



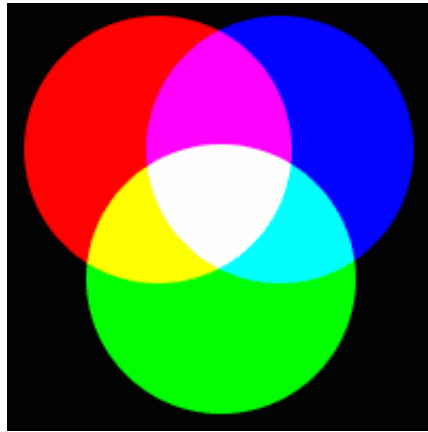
Passion Recherche – Jumelage CNRS / Collège



*P. Arnaud Chimie Physique
Dunod (1991)*

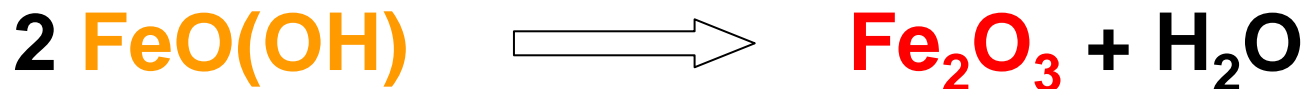


Synthèse soustractive



Synthèse additive

Réaction Chimique



T = 300°C