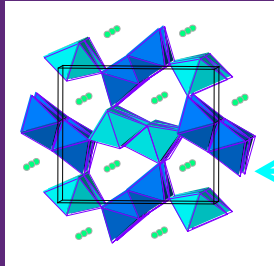


CaCr₂O₄ :

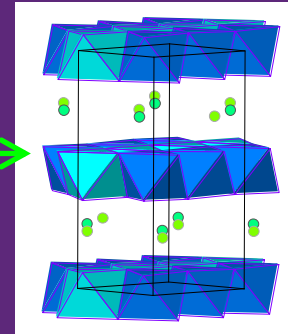
plusieurs formes suivant les conditions de synthèses (α , β , δ)
 utilisation du SPS pour stabiliser la forme haute température

β -CaCr₂O₄

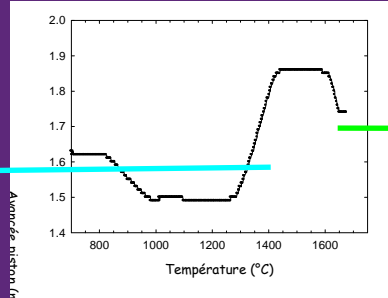


β (température intermédiaire)
P b n m
 10.6203 Å
 9.0801 Å
 2.9681 Å
 286.3 Å³ (Z=4)

α -CaCr₂O₄

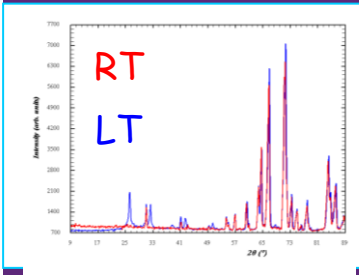
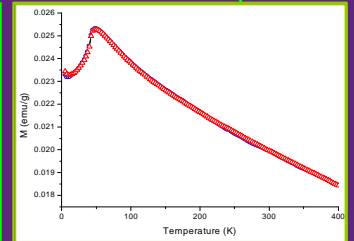
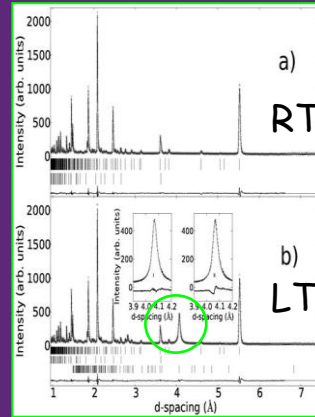
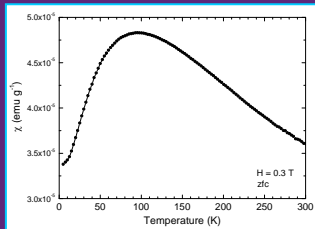


α (haute température)
P m m n
 11.0656 Å
 5.8307 Å
 5.0649 Å
 326.8 Å³ (Z=4)

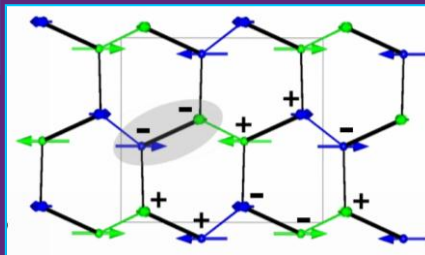


SPS
 HPD25-FCT

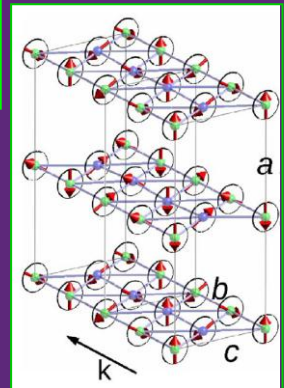
structures différentes \Rightarrow comportements magnétiques différents



NPD-G41 (LLB)



NPD-Wish (ISIS)



Phys. Rev. B 81, 214405 (2010): Zigzag ladders with staggered magnetic chirality in the S=3/2 compound β -CaCr₂O₄

Phys. Rev. B 83, 024409 (2011): Helical magnetic state in the distorted triangular lattice α -CaCr₂O₄