

Applying Quantum Mechanics to Alloy Design for Nuclear Reactor Steels

Tuesday 04 June 2013

The 4th Workshop on Nuclear Fe Alloys: Modelling and Experiments (n-FAME) and 22nd Workshop on Fe-Cr Alloys: Day 1 - CSEC Seminar Room 3808 (08:30-17:00)

time	[id] title	presenter
08:30	Tea/Coffee	
09:00	[0] Modeling of Radiation Induced Segregation in Dilute Fe-Cr Alloys	SOISSION, Frédéric
09:30	[20] Transmission Electron Microscopy (TEM) investigation of the microstructure evolution under neutron and ion irradiation of FeCr alloys	HERNÁNDEZ-MAYORAL, Mercedes
10:00	[21] A radiation-induced nanostructure evolution model for Fe-C, Fe-C-Cr and other alloys	MALERBA, Lorenzo
10:30	[22] A Direct Comparison of Fe6%Cr Subject to Ion and Neutron Irradiation	HARDIE, Christopher
11:00	Tea/Coffee	
11:30	[23] Modeling of diffusion, segregation and decomposition of alloys using OKMC: Applications to FeCr	MARTIN-BRAGADO, Ignacio
12:00	[24] Application of a three-featured dispersed-barrier hardening model to neutron-irradiated FeCr alloys	BERGNER, Frank
12:30	[25] Ab initio study of basic properties of minor alloying elements in high-Cr ferritic steels	MALERBA, Lorenzo
13:00	Lunch	
14:00	[26] Ab initio investigation of austenitic steels: The interplay of composition, magnetism and mechanical behaviour	HICKEL, Tilmann
14:30	[27] Finally, a functional spin-polarized potential for alpha and gamma iron?!!	WALLENIUS, Janne
15:00	[28] Quantum mechanical simulation of magnetic alloys: The correct tight-binding Hamiltonian	COURY, Marc
15:30	Tea/Coffee	
16:00	[29] A New Mechanism of Loop Formation and Transformation in bcc Iron without Dislocation Reaction	CHEN, Jiachao
16:30	[30] SANS-TEM results correlation on irradiated steels	COPPOLA, Roberto