



Université Blaise Pascal

UNIVERSITÉ BLAISE PASCAL
U.F.R de Recherche Scientifique et Technique



CYCLE DE CONFÉRENCES DE CHIMIE

Avec le concours de : *Manufacture Française des Pneumatiques MICHELIN*
Centre de Développement Préclinique, Schering-Plough
Fédération de Chimie (FR 2404)
Section Auvergne de la Société Française de Chimie
U.F.R.S.T. / Master de Chimie / Département de Chimie

Mardi 1^{er} Décembre 2009 à 16h

Amphi de Chimie Paul REMI - (Site des Cézeaux)

Pr. Francesc DIAZ

*University Rovira i Virgili (URV) FiCMA (Physics and Crystallography of
Materials Tarragona (Spain))*

Preparation and nanostructuration of monoclinic double tungstates

Monoclinic double tungstate (DT) crystals doped with RE ions are recognized as relatively new and very promising materials for solid state lasers operating at room temperature, both in pulsed and continuous-wave mode. Their low laser threshold, high efficiency, and third-order nonlinear effects stimulate research towards miniaturized lasers and amplifiers. Due to their high refractive indices on the order of 2.0, they are quite suitable for the fabrication of integrated optical devices.

In this talk, the crystal growth of bulk and epitaxial layer of DT shall be presented and the recent progress in nanostructuration for photonic applications will be introduced.