Contribution ID: **1** Type: **oral**

Synthesis and Characterization of Carbide Foams for the SPES target

Monday, 29 March 2010 11:25 (5 minutes)

Materials used in targets for RIBs production have to satisfy several requirements, related to their capability both to produce specific isotopes with high efficiencies and to withstand harsh operating conditions.
Within the SPES group, new carbides with tailored properties are currently studied and developed in order to maximize isotopes production at extreme conditions.
In particular, lanthanide and transition metal carbide foams possessing a large amount (up to 90%) of open interconnected porosity have been produced.
Characterization of these foams is made by evaluation of different aspects:
1) Quantity and size of the pores created during the foaming process
2) Type of porosity obtained
3) Effect of porosity on physical properties such as thermal emissivity and gas permeability.

Primary author: Mr CORRADETTI, Stefano (INFN-LNL)

Co-authors: Dr ANDRIGHETTO, Alberto (INFN-LNL); Dr BIASETTO, Lisa (INFN-LNL); Prof. ZANONATO, Piero (Università di Padova); Dr CARTURAN, Sara (INFN-LNL)

Presenter: Mr CORRADETTI, Stefano (INFN-LNL)

Session Classification: Introductions to Posters

Track Classification: Materials science, nanomaterials