## **CIEMAT MELCOR RELATED ACTIVITIES: YEAR 2009**

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## ABSTRACT

MELCOR is one of the main severe accident analytical tools used by CIEMAT. Along 2009 the major activities conducted with MELCOR were either a continuation of already ongoing simulations aimed at validation of the code against experimental data (i.e., PHEBUS-FP) or scoping calculations to assess how relevant iodine chemistry could be when estimating source term in postulated severe accident scenarios of Spanish NPPs. In addition, during 2009 the MELCOR use was extended to the area of postulated accident analysis in fusion devices. This presentation will give a snapshot of all these activities with some insights into the experience gained and the difficulties found through all of them.