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## ITR/P5-14: Activation Analyses of Lead Lithium Cooled Ceramic Breeder Test Blanket Module in ITER

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India has proposed a test blanket module (TBM) to be placed in ITER equatorial port for testing Lead-Lithium cooled Ceramic Breeder (LLCB) concept. The LLCB blanket concept consists of lithium titanate as ceramic breeder (CB) material in the form of packed pebble beds and Pb-Li eutectic as multiplier, breeder, and coolant for the CB zones. The blanket module structure will be cooled by helium. RAFMS will be used as a structural material and tritium produced in ceramic breeder will be purged by Helium gas. A electrical insulation of Alumina is being considered presently for reduction in MHD effects. The LLCB TBM will face the neutron flux and will be irradiated during the ITER operations. A data base of activation characteristics is required for safety analyses of LLCB TBM. The activation analyses has been carried out assuming the irradiation scenario given in ITER TBM safety guidelines using EASY-2007. The radioactive inventory, decay heat and dose-rate have been calculated at the shutdown and several post-irradiation times following the pulsed operation scheme of ITER. In this paper we present the main results of the activation analyses of LLCB TBM.

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