

TITOLO: 2D NMR relaxation maps of cementitious materials: acquisition, and computation with the MUPen2D Software

Oggetto dell'attività di ricerca

MUPen2D is a free software under development at Unibo (DICAM, DIFA and Math Department) devoted to creating 2D maps from NMR relaxometry measurements. The software is already fully functional (it can be freely downloaded from the Unibo webpage "<https://site.unibo.it/softwareedicam>"), nevertheless it still requires long test trainings to calibrate its default parameters values for different type of materials. The aim of the work is to create a set of calibrated MUPen2D parameters specifically suitable for cementitious materials.

Therefore, the expected results of the Research are many 2D NMR acquisitions performed on different cement pastes, characterized by different preparation, and the corresponding 2D maps computations performed with MUPen2D in order to identify a set of common parameter values.