## Understanding the physico-chemical behaviour of cement based materials using micro-analytical studies





**Scanning Electron Microscope (SEM)** 

Laboratory for micro-analytical and characterization of civil engineering materials (MAC-CEM Lab)

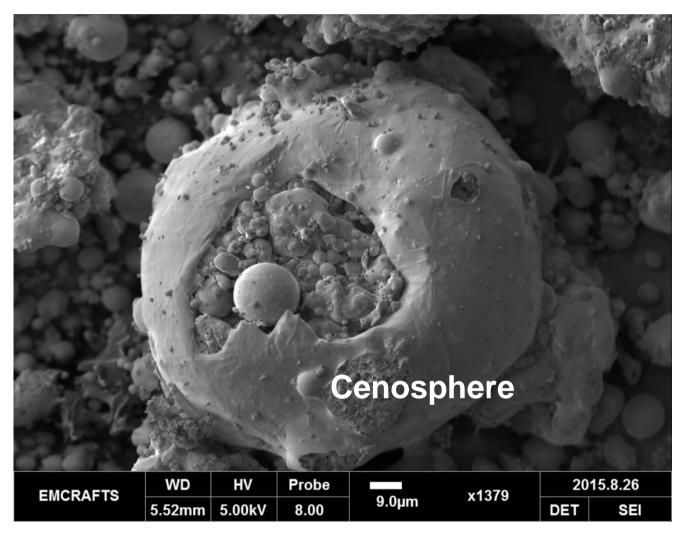


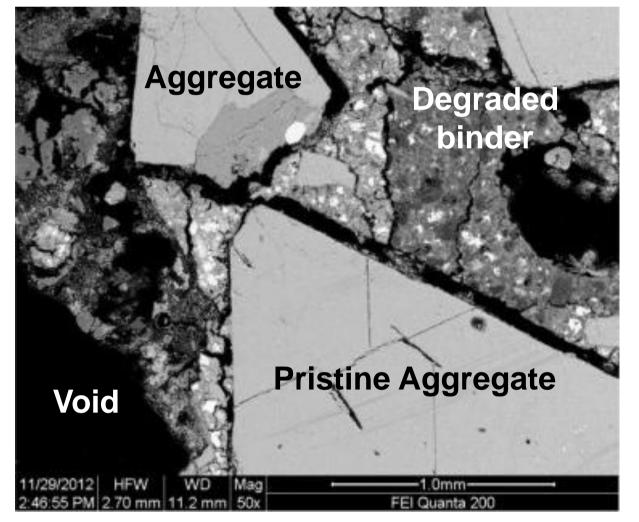
**Optical Microscopes** 



Polishing Machine with Epoxy Impregnation

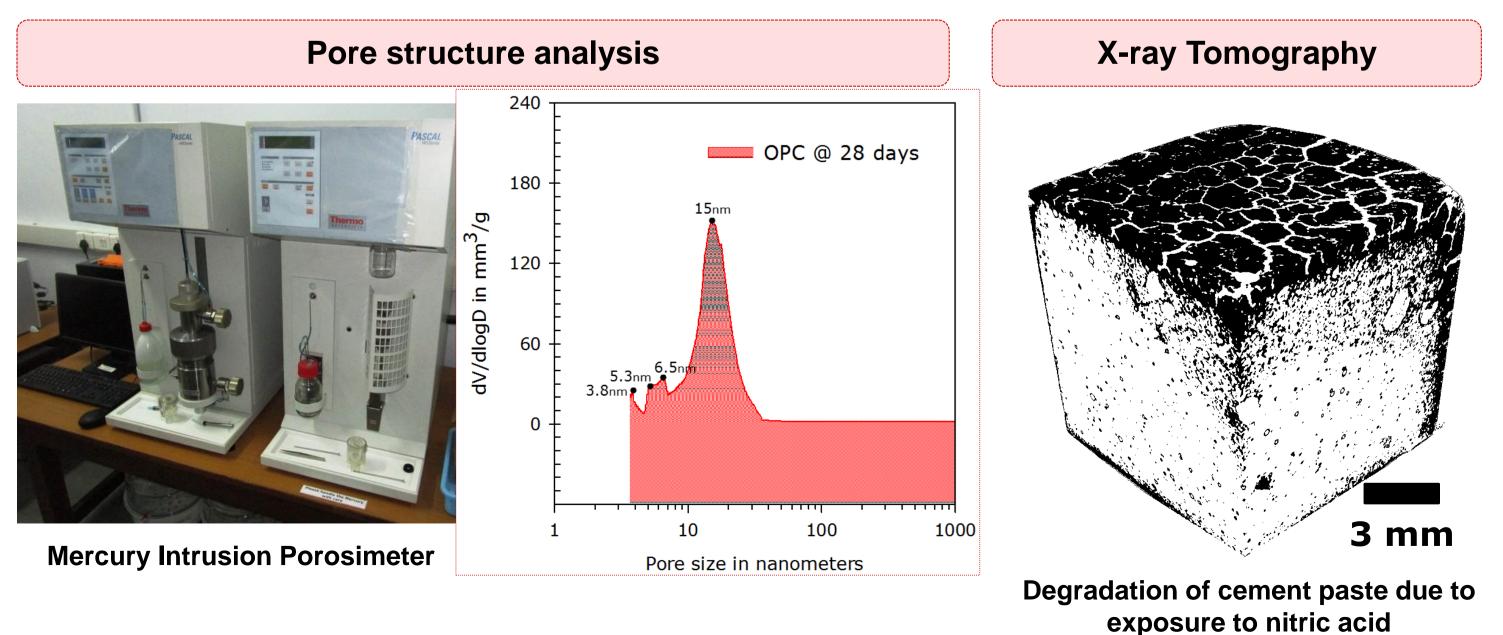
## Microscopic image analysis for understanding material behaviour and degradation





Morphology of Class F fly ash

Microstructure showing degradation of cement mortar due to liquid sodium exposure



Poster designed by Murugan M, PhD Scholar