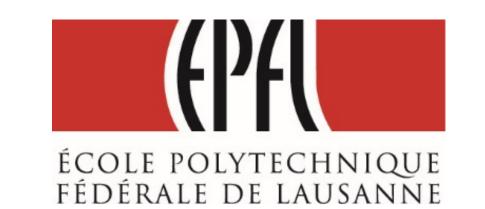


## <sup>1</sup>H Nuclear Magnetic Resonance (NMR)

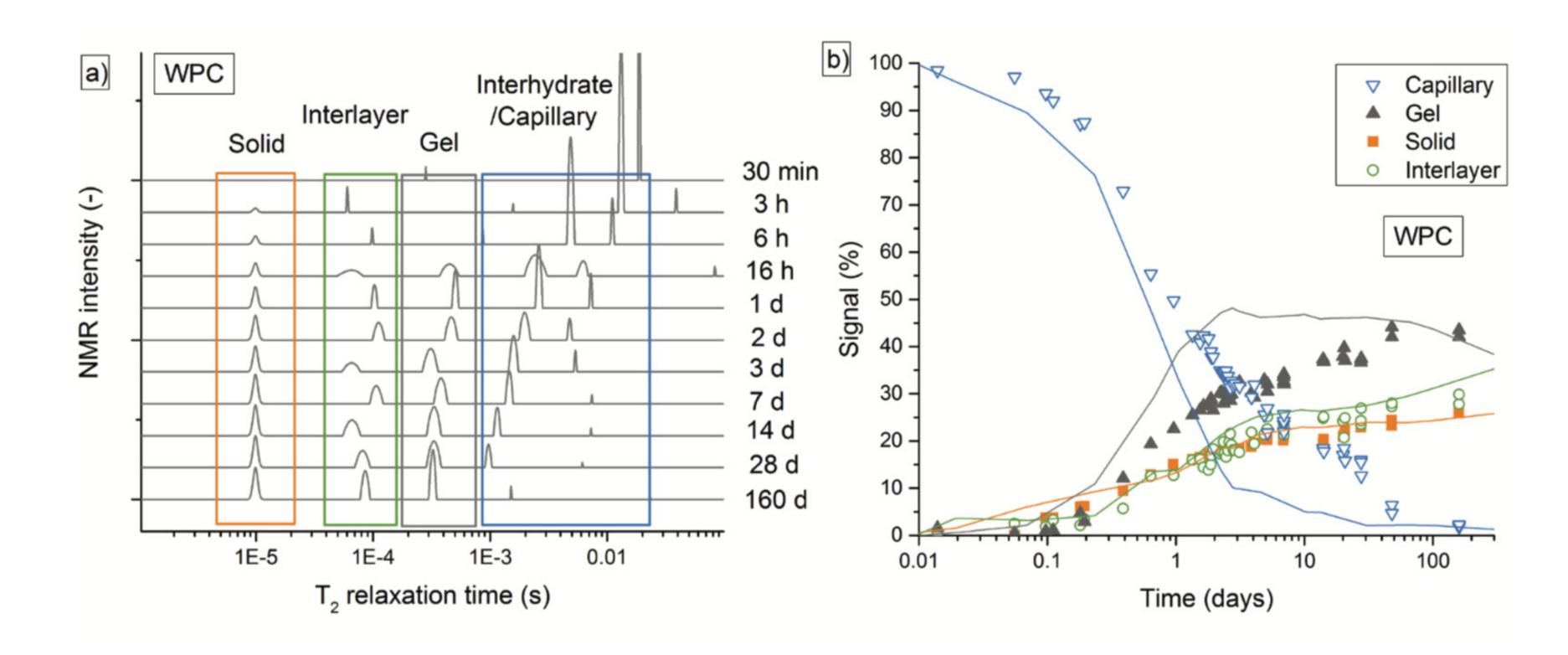


## What is it used for?

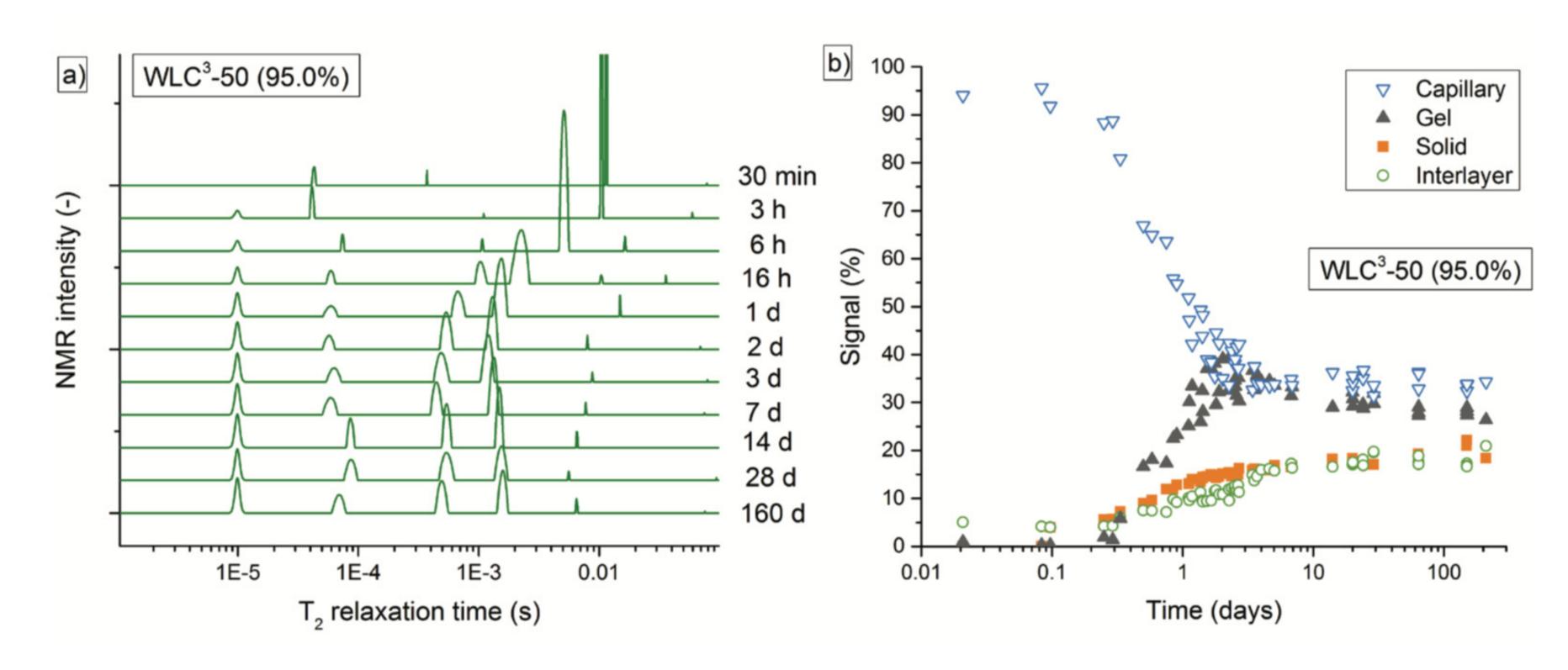
- ☐ Porosity of cement without water removal
- ☐ Better understanding of pore network
- ☐ Hydration study
- ☐ C-S-H density



Bruker Minispec NMR spectrometer



Evolution of (a) relaxation time and (b) the different NMR signal fractions for WPC. Plain lines indicate Müller's data for WPC



Evolution of (a) relaxation time and (b) the different NMR signal fractions for WLC<sup>3</sup>-50 (95.0% metakaolin)