

EVALUATION OF DEGREE OF HYDRATION IN CONCRETE USING ^{29}Si MAGIC ANGLE SPINNING NMR IN SOLIDS.

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Abstract: The degree of hydration of cement and concrete can be followed using ^{29}Si MAS-NMR. Preliminary results of the effects of hydration on the distribution of silicate polymers in concretes of known mix designs, as well as the constituent cement, are presented. The spectra of the sand and aggregate used are also given. The technique appears promising as a means of monitoring concrete silicate anion structure and its possible correlation with mechanical properties.