



COURSE DATASHEET

Semester:	2014/15/1
Course:	Special Topics for Individual Research
Code:	VEMKSIB122S
Responsible department:	Institute of Materials Engineering
Department code:	MKSI
Responsible instructor:	dr. Tamás Korim

Course objectives:

Teaching the treating methods of the special scientific literature. Students are given themes in foreign language. They treat them and give an oral presentation in 30 minutes

Course content:

NMR spectroscopy in liquid and solid state; Multinuclear NMR methods (^{29}Si , ^{31}P , ^2H); Cements and concretes with special properties; Bioceramics; Ceramic superconductors; Semiconductors; Aluminium-titanate ceramics; New trends in the field of mechanochemistry; Raw materials in the silicate industry; Glazes for ceramics; Solar cells; Fire resistant materials; New trends in the brick industry (application of the energy grass); Geopolymers; Electron microscopy (TEM, SEM); High strength glasses;

Requirements, evaluation and grading:

Required and recommended readings:

Szalontai Gábor: Bevezetés az NMR spektroszkópiába (kidolgozott előadásábrák) Szalontai Gábor: NMR vizsgálatok szilárd fázisban (jegyzet) Szalontai Gábor: NMR spektroszlópia (jegyzet)