



SUBJECT DATASHEET

Semester:	2009/10/1
Subject:	Introduction to Silicate Technology I.
Code:	VEMKSI5132T
Responsible department:	Institute of Materials Engineering
Responsible department code:	MKSI
Responsible lecturer:	dr. Margit Eniszné Bódogh

Educational objectives:

Introduction the most important theories and measuring methods in silicate chemistry and technology

Detailed content of the subject:

Investigation of phase composition of ceramic bodies Particle size distribution analyses of ceramic bodies and glazes Preparing of plastic bodies, investigation of plasticity and drying sensitivity Shaping of plastic bodies by jiggering Preparing of casting slips, determination of the optimum electrolyte content Shaping of ceramics by casting Measuring of thermal expansion of ceramic bodies and glazes Investigation of porosity, bulk density and firing shrinkage of fired ceramic bodies Glazing and decorating of ceramic bodies Color measuring of glazed ceramics Particle size distribution analyses of ceramic bodies and glazes Investigation of morphology of fired ceramic bodies by electron microscope Investigation of body/glaze interface by optical microscope Qualification of gypsum binder materials Measurement of specific surface, setting time and volume stability of cements

Requirements:

Compulsory attendance - making reports of each experiment, passing final test

Required and suggested references:

Tamás F.: Szilikátipari laboratóriumi vizsgálatok, Műszaki Könyvkiadó, Budapest, 1970 Laboratóriumi segédlet (tanszéki kiadvány)