

I. IDENTIFICATION DATA

Thesis name:	Characterisation of historic burnt clay building ceramics with respect to their production technology and raw material provenance
Author's name:	Nigar Shaikh
Type of thesis :	Master's thesis
Faculty/Institute:	Faculty Of Civil Engineering/ Czech Technical University In Prague
Department:	Department of Mechanics
Thesis reviewer:	Ing. Zuzana Slížková Ph.D.
Reviewer's department:	Institute of Theoretical and Applied Mechanics of the Czech Academy of Sciences

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	More difficult.
<i>Evaluation of thesis difficulty of assignment.</i>	
The assignment of the thesis was more difficult concerning the time available for the work, the extent of experiments and the difficulty of interpreting the results, especially results of mineralogical analyses.	

Satisfaction of assignment	Satisfied.
<i>Assess that handed thesis meets assignment. Present points of assignment that fell short or were extended. Try to assess importance, impact or cause of each shortcoming.</i>	
The assignment was fulfilled. Four local clays were tested and characterized both in the raw and burnt conditions. The obtained material characteristics and knowledge are contributive for designing of conservation and restoration interventions with the historical ground floor. Characteristics and behavior of sampled local clays were discussed in the context of planned historical tile replicas production.	

Method of conception	Correct.
<i>Assess that student has chosen correct approach or solution methods.</i>	
A correct methodology was adopted to compare the mineralogical composition of the historical tile with the local clays burnt at various temperatures. Also, the student correctly chose methods for determining the most important chemical and physical material characteristics in relation to conservation purposes. A small issue in the methodology is with the less attention to the role of water and technics of preparation of specimens from raw clay (mixing, moulding and pressing technics). Probably also these aspects could influence the microstructure of the burnt clays, in addition to the clay composition and the burning process effects. It would be beneficial to point out and discuss these technics influence at least on the basis of a literature review.	

Technical level	D
<i>Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.</i>	
The technical level of the thesis fluctuates, and the weaker parts are mainly in the literature review and description of used methods principles and aims. The experimental part of the thesis and results have a more satisfying level, but unfortunately, there are mistakes in the text like missing or incorrect units, a discrepancy between data in tables and commenting text, inaccurate formulation of some claims. This probably reflected the lack of time for processing the thesis.	

Formal and language level, scope of thesis	B
<i>Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.</i>	
The typographical and language arrangement of the thesis are good. Sometimes, there are missing or incorrect links to figures in the text. The scope of thesis is superior.	

Selection of sources, citation correctness

D

Present your opinion to student's activity when obtaining and using study materials for thesis creation. Characterize selection of sources. Assess that student used all relevant sources. Verify that all used elements are correctly distinguished from own results and thoughts. Assess that citation ethics has not been breached and that all bibliographic citations are complete and in accordance with citation convention and standards.

The student used relevant sources, and citation ethics have not been breached. Unfortunately, the citations' writing is not uniform, and particularly sources of images from web pages are not correctly cited.

Additional commentary and evaluation

Present your opinion to achieved primary goals of thesis, e.g. level of theoretical results, level and functionality of technical or software conception, publication performance, experimental dexterity etc.

No additional comments.

III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

Summarize thesis aspects that swayed your final evaluation. Please present apt questions which student should answer during defense.

The work involves a large experimental study and brings a number of practical results. After removing formal deficiencies and improving some claims formulation, I recommend publishing the results in a professional journal.

I evaluate the handed thesis with classification grade C.

Date: **16.7.2018**

Signature: