

Supervisor statement to PhD thesis by Gianmarco Taveri

Gianmarco Taveri successfully underwent a 3 years training period as an Early Stage Researcher (ESR) within European project CoACH (Advanced glasses, Composites And Ceramics for High growth Industries - European Training Network (ETN), call MSCA-ITN-2014-ETN, Nr. 642557). He was contracted from 1st of September 2015 and later, from 8th of October 2015, he was enrolled into PhD study program at Faculty of Mechanical Engineering. His PhD study has been carried out in the frame of Brittle Fracture Group, Institute of Physics of Materials, CAS. The topic of his PhD project was focused on **“Geopolymers incorporating wastes and composites processing (Geopolymerie obsahující odpadní látky a příprava kompozitů na jejich bázi)”**. At present (from September 2018), G. Taveri has been employed as a researcher being financed from Institutional funds of IPM and project of Czech Science Foundation.

Gianmarco Taveri successfully passed through all planned activities, in addition, he participated on all activities organised by CoACH consortium including “CoACH” School at Nanoforce Technology Ltd., Queen Mary University of London, UK, “Geopolymer camp” School, Saint Quentin, France and a number of special workshops focused on soft skills. He spent 3 weeks of research stay at University of Erlangen-Nuremberg, Germany, 3 weeks at Nanoforce Ltd., Queen Mary University, London, UK, and two months at company Sasil S.p.a., Brusnengo (Biella), Italy.

He has got experience with precursors functionalisation, geopolymers preparation from fly ash and glass waste materials including composites preparation incorporating cellulose fibres. In addition, he is skilled in different samples preparation for microstructural observations and mechanical testing, with all necessary ceramographic techniques and materials characterisation methods including scanning electron microscopy. All the stages of his research and results of partial tasks solutions have been discussed by scientific community thanks to his presentations at 10 international conferences and CoACH project workshops.

He has been working systematically and effectively with effort concentrated on the particular problem solution. After he obtained corresponding experimental skills and experimental results, he approached to thesis completion. Note that the topics included into the thesis cover comparably extensive number of material science fields, from pure chemical routes of precursors functionalisation up to fracture micromechanisms evaluation.

His finding contributed to Czech Patent Application “Process for the Consolidation of Inorganic Powders Using Hydrostatic Pressure” Nr. PV 2018-420. He published as author or co-author 5 papers in impacted journals, one of them having impact factor 13.3 and independently of short time after opening the paper for public she already got 13 citations (excluding self-citations) to these papers.

Results up to now have shown that he is capable of working creatively and is having potential for new findings. He is able to work independently having original ideas in his approaches and being able to formulate future goals for the further continuation of the work in field of his thesis and/or also other scientific fields. Because of filling all criteria for PhD qualification I do recommend to accept his thesis as PhD thesis and as a proof of his skills. After successful defence I recommend to award him PhD title in Materials Sciences.


Prof. Ing. I. Dlouhý, CSc.

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