

## Preface

The Civil engineering is traditional branch of industry where has used common materials and process already for years, but current time places higher demands on properties of new materials or human comfort in building. This proceeding is composed of contributions that present the research of PhD and masters candidates from the Faculty of Civil Engineering, Czech Technical University in Prague. These contributions were presented at the 5<sup>th</sup> annual conference "Nanomaterials and Nanotechnology in Civil Engineering 2016". The conference was held in Prague on June 15, 2016.

The organizers are pleased by the enthusiasm of students and professional public who regularly participate at conference and that the number of participants is constantly increasing. The traditional "nano-related" topics were extended to bring new insights into measurement and testing of microstructures or properties of materials on level at nano- and micro-scale.

A relationship between compounds or particles used, their properties at micro-scale and effective properties the material system at macro-scale is common to the majority of contributions. The practical applications of nanofiber structure investigation and research into nanoparticles emerge as nanotechnologies become quite easily available in the industry.

A significant portion of the presented papers were created in cooperation with the Center for Nanotechnology in Civil Engineering at the Faculty of Civil Engineering, Czech Technical University in Prague and Joint Laboratory of Technology Polymer Nanofiber Institute of Physics of the Czech Academy of Sciences and Civil Engineering at the Faculty of Civil Engineering, Czech Technical University in Prague.

# Organizing Committee

Department of Building Structures, Faculty of Civil Engineering, Czech Technical University in Prague

Center for Nanotechnology in Civil Engineering at the Faculty of Civil Engineering, Czech Technical University in Prague

Joint Laboratory of Technology Polymer Nanofiber Institute of Physics of the Czech Academy of Sciences and Civil Engineering at the Faculty of Civil Engineering, Czech Technical University in Prague

## Members of the Organizing Committee

Pavla Ryparová

Zuzana Rácová

Václav Nežerka

Pavel Tesárek

Zdeněk Prošek

Michael Somr

## Reviewers

Ing. Pavel Tesárek, Ph.D.

Ing. Tomáš Plachý, Ph.D.

Ing. Aleš Jíra, Ph.D.

Ing. Václav Nežerka, Ph.D.

## Editors

Pavla Ryparová

Pavel Tesárek

**Conference website:** <http://vmproceedings.com/conferences/2016-nans-cz.htm>

## Acknowledgements

The conference was financially supported by the grant provided by the Czech Technical University agency, grant number **SVK 04/16/F1**.