

# PREFACE

Construction of healthy and sustainable buildings is a subset of the sustainable development movement, which has been evolving worldwide for more than two decades. The goal of sustainable construction is creating and operating a healthy built environment based on resource efficiency, social, ecological, and economic principles. These principles apply across the entire life cycle of a building.

The aim of this 8<sup>th</sup> International Conference Buildings and Environment 2013 (enviBUILD) *Healthy and Sustainable Built Environment* is to bring together various existing or emerging research and training activities dealing with materials, building envelope systems, their design and the prediction of healthy, comfortable, and economically effective indoor environment, performance evaluation, etc. Highly appreciated are also contributions that help to create the framework for better implementation of ecological principles into existing technical specifications, legislation and building practice.

The next pages introduce the papers which are focused on following topics:

- Indoor Environment and its Hygienic Aspects
- Energy and Environmental Assessment of Sustainable Buildings
- Nearly Zero Energy Buildings
- Intelligent Buildings and Technologies
- Effective Ventilation of Buildings
- Renewable Materials and Energy Sources
- Daylighting and Insolation
- Building Acoustic
- Building Simulation

This International Conference was jointly organized by the Faculty of Civil Engineering of the Slovak University of Technology in Bratislava and the IBPSA – Slovakia branch of the Slovak Society for Environmental Technology. The Conference was supported by the partners whose logos are on the title page of these proceedings.

Finally, let us express many thanks to all those who spent their time and contributed to the organization of the conference – members of the Scientific and Organization Committees, authors or editors.

Ing. arch. Katarína Minarovičová, PhD.  
Organizing Committee

Prof. Ing. Jozef Hraška, PhD.  
Scientific Committee