



## **Report on training in innovative technologies in energy efficiency in buildings within TEMPUS - Energy Efficiency, Renewable Energy Sources and Environmental Impacts - master study "ENERESE"**

*Period: 04.12.2015. – 08.12.2015.*

*Place: AristotleUniversity of Thessaloniki, Greece*

*Coordinators: Prof. Agis M. Papadopoulos and Prof. Maja Todorović*

### Timeline of activities

<b>Period of time</b>	<b>Activity</b>
04.12.2015	Arrival in Thessaloniki around 15:30h local time;
04.12.2015	Welcome and Coordination meeting of teaching staff from AUTH and UB from 17 to 18h;
05.12.2015	Workshop for PhD students: Energy efficiency and Intelligent buildings – practical examples from Serbia with discussion and conclusions about the topic from 9 to 11:30h.
07.12.2015	<p>The meeting started at 9h according to the Agenda. Three courses were held: the first one about Special Chapters on Energy Efficiency in Buildings. Lecturer Prof. Dr. Maja Todorovic, Faculty of Mechanical Engineering University of Belgrade also presented the curriculum of Faculty of Mechanical Engineering and related subjects having in mind a possible future collaboration on Erasmus Plus Projects. Second course on Special Chapters on Automatic control in Intelligent Buildings was presented by lecturer Prof. Dr. Milan Ristanović, Faculty of Mechanical Engineering University of Belgrade. Professor Ristanović also discussed about possible collaboration between two Universities regarding students' and staff exchange and courses about intelligent buildings and automatic control.</p> <p>Third course about Special Chapters on IEQ in Non-residential Buildings was presented by lecturer M.Sc.Mech.Eng. Tamara Bajc, Faculty of Mechanical Engineering University of Belgrade.</p> <p>From AUTH/PEDL participated Prof. A.Papadopoulos, Prof. G.Tsilingiridis, Assoc.Prof.D.Papakostas, Academic Associates Dr. E.Giama, K.Paspalas, P.Kikidis, Dr.S.N.Boemi and PhD Students of PEDL .</p> <p>Furthermore, Prof. Panos Seferlis, Head of the AUTH's Department of</p>

Mechanical Engineering, joined the meeting, to discuss the possibilities of future co-operation.

08.12.2015 Final meeting with Professor Papadopoulos from 11:30 to 13h: Peer review of teaching materials by EU partners, discussion about the achieved results, and future mutual collaboration.

08.12.2015 Departure from Thessaloniki; flight at 16:30h local time.

### Narrative report

The topics of this training were: Energy efficiency in buildings, Intelligent buildings and automatic control systems in buildings and Indoor environmental quality in non-residential buildings.

The first part of the training was dedicated to training within the workshop about Energy efficiency and Intelligent buildings through the presentation of practical examples from Serbia. The several practical project and representative buildings were presented and the designed solutions were discussed. The second part of the training was dedicated to a theoretical training on topics concerning indoor air temperature, velocities, relative humidity and CO2 concentrations, together with the innovative technologies and automatic control systems to improve energy efficiency in buildings. Also, the existing residential building sector, together with public buildings and possible measures to achieve energy and money savings were presented. Besides the important part of the meeting was a discussion about future collaboration within the Erasmus Plus framework.

At the end of the training, the final meeting was held. The meeting included the summary of the results that are achieved, together with the review of teaching materials by EU partners and also plans for future collaboration and research.

### The photos from the meeting





14.12.2015.

*Report prepared by:*

*Tamara S. Bajc, M.Sc. Mech. Eng.*

*Prof. Dr Maja Todorović*

*Prof. Dr Milan Ristanović*

*University of Belgrade,*

*Faculty of Mechanical Engineering*