#	**Aleksandar Andjelkovic** PhD, Mechanical Engineer	
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Presentation title:	**Application of an adaptive facade - case study of double skin façade in moderate climate**	

The envelope (facade) is the part of the building which forms the primary thermal barrier with its environment. It represents the most important factor in determining the level of thermal comfort, natural lighting and ventilation ability, and finally how much energy is needed for heating and air-conditioning.

Research generally refers to the consideration of the concept of a double skin facades (DSF) and their impact on energy efficiency of the building. This concept is an example of adaptive facades. The research plan is based on experimental work and on the numerical model simulation. Thus, the task of this research is too experimentally and numerically study the potential of multi-storey naturally ventilated DSF in order to reduce the building energy consumption. The main question that arises is whether and how the DSF may contribute to the decrease in the building energy consumption by increasing quality of the thermal comfort of the occupants. Although the main aim of the study is to provide universal and comprehensive methodology for calculation and analysis, research is mainly focused on multi-storey naturally ventilated DSF type located in the climatic conditions of the moderate continental climate.

CV:	

Assistant professor, researcher and independent consultant focusing on: HVAC systems; energy efficiency; building design, performance and operation; renewable energy; energy audits and management; district heating and cooling systems. A highly motivated mechanical engineer with an expertise in HVAC&R systems and renewable energy with a broad and acute interest in developing energy efficient buildings. Collaboration with experienced scientists from prestigious universities resulted in developing new skills such as performing research independently, as well as strong writing/publishing and teaching skills. Active in ASHRAE, IBPSA, CIBSE, and reviewer of three international and national journals. Published more than 30 papers/articles and made more than 100 presentations on HVAC energy efficiency, sustainability, and renewable energy throughout the world. An enthusiastic, adaptive and fast-learning person with diverse interests which will all contribute to the improvement of personal and professional performances.

HONOURS/AWARDS/FELLOWSHIPS/TRANINGS

- Advanced training on University of Warwick, Coventry, England, UK , UK UKERC Annual Energy Summer School 2010; Organizers: University of Oxford, University of Warwick, Imperial College London, UK Energy Research Centre London
- Completed LEED Green Associate Training and Exam preparation course
- 4th place (Rising Star) on ASHARE World Design Competition 2011, Integrated Sustainable Building design, project leader
- 2nd place on ASHARE World Design Competition 2012, Integrated Sustainable Building design, project leader
- ASHRAE Grant-in-Aid (American Society of Heating, Refrigerating and Air-Conditioning Engineers) for outstanding students of ASHRAE-related technologies. Hold the added distinction of being named the 2011-2012 ASHARE Life Member Club Grant.
- Advanced training on University of Cambridge, UK, EAFES Sustainable Energy Summer School 2012; Organizers: University of Cambridge, European Agency for Energy Security
- Grant from Austrian Federal Ministry of Science and Research (BMWF) for Scientific Staff Exchange
- Advanced training on Technical University of Vienna, Austria, Department of Building Physics and Building Ecology

MEMBERSHIP/POSITIONS OF RESPONSIBILITY

- Member of ASHARE (American Society of Heating, Refrigerating and Air-Conditioning Engineers), founder and first president of University of Novi Sad ASHRAE Student Branch
- Member of IIR/IIF International Institute of Refrigeration
- Member of Society for HVAC&R of Serbia
- Member of Society of Thermal Engineers of Serbia
- Member of IBPSA (The International Building Performance Simulation Association)
- Member of CIBSE (The Chartered Institution of Building Services Engineers)
- Member of Steering committee of Union of Mechanical and Electrical Engineers and Technicians of Serbia
- Member of Organizing Committee of International Congress on Heating, Refrigerating and Air-Conditioning, Belgrade, Serbia (2012, 2013, 2014, 2015)
- Member of Student Activities Committee of ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Danube Chapter
- Member of Technology Transfer Committee of ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Danube Chapter
- Chair of Young Engineers Committee of ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Danube Chapter

- Member of review board for 2 international peer review journals: "Energy and Buildings" and "Thermal Science"
- Certificate of Outstanding Contribution in Reviewing, Journal "Energy and Buildings", Elsevier
- Member of Editorial Board of Scientific and Professional Journal for Air-Conditioning, Heating and Refrigeration (KGH), ISSN 0305-1426
- Member of Grassroots Government Activities Committee of ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Danube Chapter University of Novi Sad ASHRAE Student Branch Advisor
- Certified LEEN (Learning Energy Efficiency Networks) Consultant Engineer. Registered by LEEN GmbH, Certificate Number etB-00145
- ASHRAE Danube Chapter Student Activities Committee Chair of ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Danube Chapter

PAPERS IN INTERNATIONAL PEER REVIEW JOURNALS

1. Anđelković, A., Cvjetković, T., Đaković, D., Stojanović, I.: The development of simple calculation model for energy performance of double skin façades, Thermal Science, 2012, Vol. 16, pages 251-267
2. Čenejac, A., Bjelaković, R., Anđelković, A., Đaković, D.: Covering of the heating load of object by using ground heat as a renewable energy source, Thermal Science, 2012, Vol. 16, pages 225-235
3. Anđelković, A., Gvozdenac-Urošević, B., Kljajić, M., Ignjatović, M.: Experimental research of the thermal characteristics of a multi-storey naturally ventilated double skin facade, Energy and Buildings (Elsevier), 2015, Vol. 86, pages 766-781
4. Sučić, B., Anđelković, A.,Tomšić, Ž.: The concept of an integrated performance monitoring system for promotion of energy awareness in buildings, Energy and Buildings (Elsevier), 2015, Vol. 98, pages 82-91
5. Kljajić, M., Anđelković, A., Mujan, I.: Assessment of relevance of different effects in energy infrastructure revitalization in non-residential buildings, Energy and Buildings (Elsevier), 2016, Vol. 116, pages 684-693
6. Anđelković, A., Mujan, I., Dakić, S.: Experimental validation of a EnergyPlus model: Aplication of a multi-storey naturally ventilated double skin facade, Energy and Buildings (Elsevier), 2016, Vol. 118, pages 27-36
7. Kljajić, M., Anđelković, A., Gvozdenac, D.: Viability analysis of heat recovery solution for industrial process of roasting coffee, Thermal Science, Volume 20, Issue Supplement 2, pp. S623-637, 2016
8. Anđelković, A., Petrović, J., Kljajić, M., Double skin façade in moderate façade – an EnergyPlus assessment, Thermal Science, 2016, accepted manuscript
9. Ignjatović, M., Blagojević, B., Stojiljković, M., Mitrović, M., Anđelković, A., Sensitivity analysis for daily building operation from the energy and comfort standpoint, Thermal Science, 2016, accepted manuscript