Lehigh University ESEI Seminar Series

Convergence of innovation and basics in buildings: energy efficiency, renewable energy and much more
Presented By:
Temur Akhmedov, LEED AP, CEM
Director of Energy Solutions
Warren Energy Engineering, LLC

Wednesday October 4th, 2017
4:30 PM- 5:30 PM
STEPS Building 101
1 W Packer Avenue, Bethlehem PA 18108
insei@lehigh.edu

Abstract: For millennia, humans built structures to meet their needs and to fit into their local environments. Through trial and error, and through studies humankind gained priceless knowledge in managing daylight, humidity, ventilation, earthquakes, pests and more. Over the last 150 years, since the start of the Industrial Revolution, it seems we forgot much of that knowledge. We developed “new knowledge” and new techniques. Now, technological advances and awareness of sustainability concerns brought us to the concepts of net-zero, high performance, green, off-grid and smart buildings. However you call these buildings, they all require a systems thinking, where systems include technologies, so-called passive efficiencies and, to the surprise of many, people occupying those facilities. Technology is exploding with seemingly no end in sight. We are revisiting age-old techniques. We are trying to understand the fundamentals of energy efficiency and energy management within buildings. In this interactive session, we will explore how convergence of rapid innovation and fundamentals of buildings, energy efficiency and on-site renewable energy will shape the future of our buildings. ...and, no, we will not forget building occupants!

Bio: Temur Akhmedov is Director of Energy Solutions at Warren Energy Engineering, a West Grove, PA based energy efficiency engineering and consultancy firm. Mr. Akhmedov is an expert in energy and resource efficiency, renewable energy and sustainability with over 12 years of experience. He combines diverse experience and deep understanding of fundamentals of energy efficiency, renewable energy and sustainability to develop comprehensive multi-year multi-million dollar energy strategies for entities with large portfolios of facilities. In his previous capacity, Mr. Akhmedov led design, a successful bid and implementation of Oklahoma State Facilities Energy Conservation Program (20x2020), a behavior based energy efficiency program with target energy savings of over $100 million by 2020. The program covered over 5,000 buildings, some 70 state agencies and state colleges, and over 80 million sq. ft. 20x2020 was the first statewide behavior based program in the country, focusing on public facilities. Mr. Akhmedov regularly speaks on issues of energy efficiency, renewable energy and sustainability, addressing diverse audiences.