


Event:  
Date:  
Place:

**ENERGY in BUILDINGS 2018**  
Saturday November 3, 2018  
Athens, Hellas



<b>EinB103</b>	<b>Olympia Ardavani</b> <ul style="list-style-type: none"><li>▪ Architect Engineer (MArch, NTUA)</li><li>▪ Environmental Engineer (MEnvSci, HOU)</li><li>▪ Lighting Designer, (Diploma, SBU-UCL)</li><li>▪ PHD candidate (HOU)</li></ul>	
Title:	Project Manager of Atlantis Design Studio	
email:	oardavani@gmail.com	
Presentation title:	<b>Utilization of Transgenic Plants, through Genetic Modification as Bioluminescent, for Outdoor Lighting</b>	
<p>This paper is part of an ongoing doctoral dissertation, which deals with the possibility of exploiting the phenomenon of bioluminescence in the Greek environment, aiming at creating sustainable conditions and reducing energy consumption for outdoor lighting. By learning from the study of bio-physical-chemical phenomena such as bioluminescence, with the help of other sciences, such as genetics and digital technology, we can “represent” and exploit them in modern design with the specific application of the illumination of shells and their surroundings.</p> <p>The aim of this dissertation is to study a free space in a Greek island or town, where a lighting scheme of bioluminescent plants will be proposed to replace part of the used artificial lighting and to make the necessary comparisons both qualitative and quantitative, by extracting a final result of calculating the amount of energy saved. To achieve these goals, a methodology is formed for selecting plants that can be acclimatized to Greek urban outdoor areas and for which there is already a genetic modification process in laboratory. Through appropriate computer software, these plants are simulated as luminescent in order to calculate their photometric data and their performance as substitute lighting sources.</p>		

Event:

**ENERGY in BUILDINGS 2018**

Date:

Saturday November 3, 2018

Place:

Athens, Hellas



CV:



**Atlantis Design**

1, Kontopoulou, Athens 15 342, tel. (+30)210 601 5884, (+30)6945 151 707, email oardavani@gmail.com, web. www.atlantisdesign.gr

## **CURICULLUM VITAE**

**NAME:** Olympia Ardavani

### **Studies, Degrees, Thesis:**

- *Architect Engineer (March, NTUA), 1980 (d. 8, 58).*
- *Environmental Design of Cities and Buildings (MEnvSci, HOU), 2009 (d. 9, 2).*
- *Lighting Design, (Diploma, SBU-UCL, London), 2000*
- *Postgraduate studies in Lighting Design (candidate for Mart, School of Multimedia Applications, HOU)*
- *PHD candidate (School of Applied Arts, HOU)*
- *Energy inspector certification, (TEE, 2015)*
- *Continuous training through seminars and workshops (NTUA, University of Athens, Private Institutions), on technological developments and software design in drawing, parametrical drawing and lighting design*
- *Training on Stage lighting (IEK Delta, Athens)2010*

### **Subject of degree lecture, NTUA:**

« Traditional Arab settlements in Tunisia: Case study, Medina Tunis», (The survey was conducted during training stage in Société Nationale Immobiliere de Tunis, through student exchange program, IAESTE) (exc.)

### **Subject of thesis, NTUA:**

«Minoan Studies Centre in Akrotiri, Santorini: Proposals to meet the energy needs of buildings with passive solar systems and wind energy», (subject of an international student competition) (exc.)

### **Subject of thesis, HOU:**

«Natural lighting through the roof of buildings: Case study of a craft building in Athenian suburb», (exc.)

### **Subject of ongoing PHD, HOU:**

«The use of bioluminescence, as a proposal to save energy in Greek suburban areas»

**Language knowledge:** Greek (exc.), English (v.g), French (g.), German (m.)

### **Professional experience:**

#### • 1976-1986

a. Free lancer and partner in private architectural offices and companies, focusing in: urban and summer housing, landscaping, religious settlements, tourist facilities, ethnic restaurants (Egypt)

b. Processing editing and drawing up tables and drawings in the textbook «Urban Design», author Professor A. Aravantinos, 1984

c. Member of the Polytechnic Committee for the population protection from Earthquakes and other Natural Disasters, (1982-1985)

#### • 1986-2018

Establishment of the architectural studio «Atlantis Design», where a large number of private architectural projects have been carried out, as well as landscaping, lighting design and interior decoration, (offices, luxury residences, conservatories, embassies, shops and exhibition stands) in Greece, Riyadh, Tunis and London, as well as renovation of preserved buildings in Athens and Santorini.

#### • Other activities 1980-2018

Participation in many conferences, seminars and workshops on architecture, sustainability, lighting design, computational design. Teaching in private training center (IEK Praxis) lessons of history of art and architecture and constructive materials as well.