



Shady Attia

EPFL-ENAC-IA-LIPID
 BP 2126, Station 16,
 CH-1015 Lausanne
 Tél: +41 21.69.30.878
 Fax: +41 21.69.30.885
 Cell : +41 78.85.42.855
 Email: shady.attia@epfl.ch
 Email: shady.attia@hotmail.com

Research and Teaching Assistant – Interdisciplinary Laboratory of Performance-Integrated Design (LIPID), Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland

Member of Task 40: Towards Net Zero Energy Buildings at the International Energy Agency

Member of Task 51: Solar Energy and Urban Planning at the International Energy Agency

EDUCATIONAL HISTORY:

PhD in Architecture, Université Catholique de Louvain, Belgium (May 2012)
Title: [A Tool for Design Decision Making Zero Energy Residential Buildings in Hot Humid Climates](#)
PhD Courses, Architecture Department Texas A&M University, USA 3.6/4.0 GPA (September 2007-May 2008)
MSc in Landscape Architecture and Planning, School of Landscape Architecture, Wageningen University, The Netherlands
 3.3/4.0 GPA + CUM LAUDE (September 2004-June 2006)
BSc in Architecture, Faculty of Fine Arts in Cairo, Helwan University, Egypt (September 1997-June 2002)
 3.2/4.0 GPA, Ranking TOP STUDENT #1/315, Best Graduation Project: [Redevelopment and Renovation of Ramses Railway Station](#)
Egyptian High School Diploma from the German School in Cairo (DEO) (May 1997)
 3.7 GPA, German Diploma (Deutsches Sprachdiplom)

RESEARCH EXPERIENCE:

Dissertation (2012): [Achieving Informed decision making for Net Zero Energy Building Design](#)
 Advisors: **Andre De Herde (UCL)**, **Jan Hensen (TUE)**, **Elisabeth Gratia (UCL)**, **Magali Bodart (UCL)**
 Aim & Outcome: **Investigating the potential impacts of using building performance simulation tools during the early design phases of zero energy building. Develop a design decision tool that helps to verify the performance of various design combinations and parameters. The tool embraces a graphical user interface for EnergyPlus in addition to a knowledge-base of guidelines, codes and case studies for zero energy design.**

Thesis (2006): [Landscape Architecture for Micro-Climate Improvement and Energy Conservation in Egypt](#), Design principals and guidelines applied for the American University in Cairo.
 Advisors: **Ingrid Duchhart (WUR)**, Aim & Outcome: **A set of landscape design principals and design guidelines for microclimate improvement and energy conservation in buildings. Applying verification and evidence based techniques such as shade studies, simulation runs and field measures for design assessment.**

Research Activities & Research Projects:

Title: **Solar Energy and Urban Planning, Client & Period:** IEA SHC Task 51 – ECBCS Annex 52, 2012-2016
Research Activities (Observer): Focus on tools that help give an overview and evaluate the energy and cost impacts of various active and passive solar options for the urban fabric. Initiate the development/spread of design tools showing the visual impact of various solar options (elements libraries) and their influence on energy generation of the built environment.

Title: [Towards Net Zero Energy Buildings](#) (NZEB), **Client & Period:** IEA SHC Task 40 – ECBCS Annex 52, 2008-2012
Research Activities (Active Member): Identify & refine design approaches and tools to support industry adoption of innovative demand/supply technologies for NZEBs. Developing simplified tools or interfaces to support integration of NZEB technologies and architecture during early design.

Title: [Solar Energy and Architecture](#), **Client & Period:** IEA SHC Task 41 – ECBCS Annex 52, 2009-2012
Research Activities (Observer): Focus on tools that help give an overview and evaluate the energy and cost impacts of various active and passive solar options for the building envelope. Initiate the development/spread of design tools showing the visual impact of various solar options (elements libraries) and their influence on the energy balance of the building.

Title: [Environmental Design in University Curricula and Architectural Training in Europe \(EDUCATE\)](#)
Client & Period: EACI-EU contribution 2009-2012, **Research Activities:** Conducting a survey targeting architectural academics and professionals in BN LX. Define strength and weakness in University Curricula of BENELUX countries (Belgium, Netherlands, and Luxemburg).

Title: **Grounds for Change: Bridging Energy Planning and Spatial Design Strategies**
Client & Period: GasUni, KNN Milieu bv, Groningen Province The Netherlands, Mai-June 2005
Research Activities: A two month research and design charette aiming to set spatial design strategies and alternatives for two zero emission development in North of Holland incorporating a multidisciplinary team of experts.

Research Proposals and Grants:

Title: European Network for Energy Performance Simulation Tools for advanced refurbishment. Towards Nearly Zero Energy Buildings and Districts (ENFORSIM), **Client & Period:** European Union, Intelligent energy Europe (30 month)
Research Activities (Active Member): An optimized and simplified use of BPS Tools in the early stage of the integrated design process

facing the nZEB and nZED challenges. (Universities and Research Centers (POLITO Italy, Fraunhofer Institute, TU Delft, VGTU, DENER, IES-VE UK, CEEI Fr) **Status & Budget:** Not accepted (1.3 million Euros)

TEACHING EXPERIENCE:

School of Architecture ENAC, EPFL

Fall 2012 - Spring 2013, Lecturer • Environmental Design Studio (LEED and Cradle to Cradle Design)

Architecture Department, College of Architecture, Texas A&M University

Fall 2007 - Spring 2008, Teaching Assistant • Environmental Design Studio (LEED and Cradle to Cradle Design)

Architecture Department, Faculty of Fine Arts Helwan University

2002 – 2004, Instructor and 2006 – 2007, Assistant Lecturer • Supervise small student group during concept development • Conduct workshops on specific issues and conduct design review sessions • Organize reference materials, visual aids & other materials • Assist in preparation and administration of examinations • Grade design sketches, exams, term papers and reports.

Teaching Courses, Workshops and Training Programs:

Courses: • Environmental Design (LEED) • Green Tools for Green Building Design • Design Foundations I & II • Environmental Design Studio I, II, III and V • Landscape Architecture & Building Construction III

Lectures & Workshops: • LEED GA • LEED AP • Designing High Performance Homes (HEED) • Climate Analysis • Tools for measuring building performance • Environmental Design • Designing Low Carbon Buildings Using Green Footstep • Building Energy Modelling (EnergyPlus, DesignBuilder & HEED) • Zero Energy Buildings Design • AutoCAD and Adobe Photoshop • Water Colouring • Digital Photographing • Portfolio Preparation

Advised Research students:

Sara Refai, Environmental Design (LEED)

Moahmed Amer

Omar Wanas

Emilie Nault

PROFESSIONAL EXPERIENCE:

LEED, Energy Efficiency and Simulation Consultant, (Belgium, Egypt)

2009 – Now • LEED Projects • Net Zero Energy Building Design • Building Energy Simulation • Environmental Impact Assessment of Buildings

Projects: Pfizer Office Belgium, Google Belgium, MasterCard Europe, NATO Europe, Credit Agricole Cairo, BNP PARIBAS Cairo, Ministry of Communication Egypt, Egyptian Earth Construction Project Cairo

Abdelhalim CDC ([Community Design Collaborative](#)), Cairo

2006 – 2007, Architect (Senior) • Conceptualize and design buildings and develop plans describing design specification, building materials costs and building schedules • Prepare project presentations, reports, sketches, models, photographs, maps, land use studies and design plans • Survey and assess designated sites and develop designs taking into consideration landscape features, buildings, environment, future usage and prepare design guidelines

Projects : Prince Khaled bin Sultan Palace and Farm (Egypt) • Shindagha Heritage Oasis, Dubai (UAE) • Mena House Oberoi Hotel (Egypt) • Ababda, LIFE project for South RedSea Region Development (Egypt) • Sound and Light, Pyramids (Egypt) • Mudon, Cities of Arabia (Damascus and Marrakesh), Dubai (UAE)

Prof. El Ghazali Kesseiba Consultancy Office, Cairo

2002 – 2004, Architect • Design and Design Development Coordination with other engineering disciplines (Structure and MEP) • Preparing of Working Drawings • Preparing of Technical Reports • Helping in preparing Quantity Survey and Bill Of Quantities

Projects : El Sahaba Mosque in Maadi (Egypt) • Family Land Cinema House in Maadi (Egypt) • Helwan University Educational Hospital in Helwan (Egypt) • Ruya Club and Country Club, 6th of October (Egypt) • Port Said National Museum (Egypt) • National Museum of Egyptian Civilization, Fustat (Egypt) • Helwan University Examination Hall in Helwan (Egypt) • Helwan University Students Campus in Helwan (Egypt) • Helwan University Stadium in Helwan (Egypt) • El Bassyouny Hotel in Port Said (Egypt) • Egyptian Embassy Djibouti (Djibouti) • Central Bank, Northern Cairo Branch (Egypt) • Talaat Harb Club, Imbaba, Cairo (Egypt) • Judiciary Academy in 6th of October (Egypt) • Housing & Development Bank in Mohandessin (Egypt)

Kheops Architects, Cairo

2002-2008 Founder, Lead Designer

Projects: Villa in Mansuriya Compound, July 2002 • Banha Commercial and Residential Mall, 2003-2004 • Drawing & Measuring: Tal3at 7arb Club Drawing, Mai 2004, El Salam Apartments Block , Suez

Competitions: Three neighborhoods design in new Cairo, November 2003 • Theatre and Cultural Complex, Port Said, Mars 2004 • Bravvo Design Competition; "Hofjes: Nieuw Leven voor een klassiek Model", September 2008

Consultations: Energy Simulation for Design Assessment • Energy Simulation for Code Compliance • Energy Simulation for LEED Buildings ECG August 2010, EECA August 2010, ECG February 2011, EECA February 2011.

Professional Registration:

- [LEED Accredited Professional](#) – since 2009
- [Licensed Landscape Architect](#) – The Netherlands since 2006
- Licensed Architect – Egypt since 2002

International Reviews:

- Journal of Energy and Buildings July 2012,

- Journal of Building Simulation May 2010-07-28 and April 2012-04-01
- Journal of Urbanism October 2011
- Journal of Construction Automation May 2012
- PLEA 2011, BESS 2011, ASES 2011, ACSA 2011 – Technical Committee Reviewer
- PLEA 2012, Greenbuild 2012, - Education Sessions Reviewer

Scientific Researches & Publications:

Books and chapters:

- Rover, R., Attia, S. et al. Towards 0-Impact Buildings and Built Environments, Techne Press, ISBN: 978-90-8594-028-9

Peer-reviewed journal papers:

- Attia, Shady, Hensen, Jan L. M., Beltrán, Liliana and De Herde, André (2011) '[Selection criteria for building performance simulation tools: contrasting architects' and engineers' needs](#)', Journal of Building Performance Simulation,, First published on: 12 April 2011 (iFirst)
- Attia, Shady, (2011) A Case Study for a Zero Impact Building in Belgium: Mondo Solar-2002, Journal of Sustainable Building Technology and Urban Development, Vol.2 No.2 (June 30, 2011) p.137-142.
- Weytjens, L., Attia, S. et al. (2011) A [comparative study of the 'architect-friendliness' of six building performance simulation tools](#), Journal of Sustainable Building Technology and Urban Development, Vol.2 No.3 (Sept 30, 2011) p.237-244.
- Attia, S., Gratia, E., De Herde, A., Hensen, J. (2012) Simulation-based decision support tool for early stages of zero-energy building design, Energy and Buildings, Available online 10 February 2012, ISSN 0378-7788, 10.1016/j.enbuild.2012.01.028.
- Attia, S., Evrard, A., Gratia, E. (2012) Development of benchmark models for the Egyptian residential buildings sector, Applied Energy, Volume 94, June 2012, Pages 270-284, ISSN 0306-2619, 10.1016/j.apenergy.2012.01.065.

Peer-reviewed papers in conference proceedings:

- Attia, S. (2012) New construction or renovation in Belgium: Setting the net and nearly zero energy building target in perspective, in the proceedings of Passive House 2012, Brussels, Belgium.
- Attia, S. and Wanas, O. (2012) The Database of Egyptian Building Envelopes (DEBE): A database for building energy simulations, SimBuild 2012, August 2012, Madison, Wisconsin.
- Attia, S., (2012) Avoiding the elephant: the net and nearly zero energy building target in Belgium, World Sustainable Energy Days, 29 February 2012 in Wels/Austria.
- Attia, S., Mlecnik, E. & Loon, S. (2012) Principles for nearly zero energy building in Belgium, World Sustainable Energy Days, 29 February 2012 in Wels/Austria.
- Attia, S., De Herde A., (2011) Early design simulation tools for net zero energy buildings: a comparison of ten tools, International Building Performance Simulation Association, November 2011, Sydney, Australia.
- Attia, S., Hamdy, M., Samaan, M., De Herde, A., Hensen, J., (2011) Towards strategic use of BPS tools in Egypt, International Building Performance Simulation Association, November 2011, Sydney, Australia.
- Mlecnik, E., Attia, S., and Van Loon, S. (2011) Net zero energy building: a review of current definitions and definition development in Belgium, in the proceedings of Passive House 2011, Brussels, Belgium.
- Attia, S., De Herde, A., (2011) Defining Zero Energy Buildings from a Cradle to Cradle Approach, Passive and Low Energy Architecture, July, Louvain La Neuve, Belgium.
- Attia, S., De Herde, A., (2011) Design Decision Tool for Zero Energy Buildings, Passive and Low Energy Architecture, July, Louvain La Neuve, Belgium.
- Attia, S., Duchhart, I., (2011) Bioclimatic landscape design in extremely hot and arid climates, Passive and Low Energy Architecture, July, Louvain La Neuve, Belgium.
- Attia, S., De Herde, A., (2010) Towards a Definition for Zero Impact Buildings, Sustainable Buildings CIB 2010, Maastricht, Netherlands.
- Attia, S., De Herde, A., (2010) Aiming Zero Impact Buildings: Mondo Solar-2002, A case study in Belgium, Sustainable Buildings CIB 2010, Maastricht, Netherlands.
- Weytjens, L., Attia, S et al. (2010) A comparative study of the 'architect-friendliness' of six building performance simulation tools, Sustainable Buildings CIB 2010, Maastricht, Netherlands.
- Athienitis, A., Attia, S et al. (2010) Strategic Design, Optimization, and Modelling Issues of Net-Zero Energy Solar Buildings, EuroSun 2010, Graz, Austria.
- Attia, S., De Herde, A., (2010) Strategic Decision Making For Zero Energy Buildings in Hot Climates, EuroSun 2010, Graz, Austria.
- Attia, S., De Herde, A., (2010) [Sizing Photovoltaic Systems during Early Design A Decision Tool for Architects](#), American Solar Energy Society, May 2010, Arizona, USA
- Attia, S. (2010) [Zero Energy Retrofit Case Study of a Chalet in Ain-Sukhna](#), EGYPT, American Solar Energy Society, May 2010, Arizona, USA
- Attia, S., De Herde, A., (2009) Bioclimatic Architecture Design Strategies in Egypt, 8th International Conference on Sustainable Energy Technologies, August 2009 Aachen, Germany
- Attia, S., Beltrán L., De Herde, A., Hensen, J., (2009) ["Architect Friendly": A comparison of ten different building performance simulation tools](#), International Building Performance Simulation Association, July 2009, Glasgow, UK
- Attia, S., De Herde, A., (2009) [Designing the Malqaf for summer cooling in low-rise housing. an experimental study](#), Passive and Low Energy Architecture, June 2009, Quebec, Canada
- Attia, S., De Herde, A., (2009) [Impact and potential of community scale low-energy retrofit: case study in Cairo](#), Smart and Sustainable Built Environments Conference, June 2009, TU-Delft, The Netherlands
- Attia, S. (2009) [Bioclimatic landscape design strategy: Bioclimatic-zone Concept for site planning in arid climates](#), Smart and Sustainable Built Environments Conference, June 2009, TU-Delft, The Netherlands
- Attia, S., Mahmoud, A., (2009) Green Roofs in Cairo: A Holistic Approach for Healthy Productive Cities, Greening Rooftops for Sustainable Communities, June, Atlanta, USA
- Attia, S. (2009) [Active solar retrofit of a residential house. a case study in Egypt](#), American Solar Energy Society, May 2009, Buffalo, USA
- Attia, S. (2006) [The role of landscape design in improving the microclimate in traditional courtyard buildings in hot arid climates](#), Passive and Low Energy Architecture, Genève, Switzerland.

Magazines Articles

- Attia, S. (2007) Rising Sea Levels threatens the Nile Delta, 'Scape: international magazine for landscape architecture and urban design, Volume 2, December, Schip van Blauw.
- Attia, S., (2008) [Going green: Aggies could be more eco-conscious](#), The Battalion, Issue date: 2/18/08 Section: 0
- Adriaens, F., and Attia, S., (2005) Grounds for Change (workshop)/ Toverketels voor een duurzame toekomst (Echo), Blauwe Kamer, 20.04.05
- Archiprix International 2003 (2004) Istanbul 2003 Rotterdam 2001, [Cairo Railway Station](#), 010 Publishers, Rotterdam, Pp. 58

Technical Reports

- Attia S & Huffschmid, D. (2005) [Energy Plantage. Leeuwarden: Look and feel](#), In F. V. Dam & K. J. Noorman (Eds.), Energy-Spatial Design Charette (pp. 69-73). Groningen: Energy Valley, KNN Milieu B.V.
- Attia S. (2010) [Building Performance Simulation Tools: Selection Criteria and User Survey](#), Technical Report, Architecture et Climat, Louvain La Neuve: Université catholique de Louvain.
- Attia, S et al. (2010) [EDUCATE State of the Art Academic Curricula and Conditions for Registration](#), Nottingham University, Mars 2010, UK.

- Attia, S et al. (2010) [EDUCATE State of the Art Professional Practice](#), Nottingham University, Mars 2010, UK.
- Mlecnik, E., Attia, S., and Van Loon, S. (2011) NZEB Definitions: current market status and certification in Belgium, IEA Task 40 Report, <http://www.iea-shc.org/task40/>
- Attia S. (2011) [State of the Art of Existing Early Design Simulation Tools for Net Zero Energy Buildings: A Comparison of Ten Tools](#), Technical Report, Architecture et Climat, Louvain La Neuve: Université catholique de Louvain.
- Attia S. (2012) [Computational Optimisation for Zero Energy Building Design, Interviews with Twenty Eight International Experts](#), Technical Report, Architecture et Climat, Louvain La Neuve: Université catholique de Louvain.

Thesis/Dissertation

- Attia, S., (2005) [New Urban Squares. Documentation for 10 urban squares in The Netherlands](#), Wageningen University.
- Attia, S., (2006) [Landscape Architecture for Micro-Climat Improvement and Energy Conservation in Egypt](#), Wageningen University.
- Attia, S., (2012) A Tool for Design Decision Making Zero Energy Residential Buildings in Hot Humid Climates, Ph.D. Dissertation, Department of Architecture, Université Catholique de Louvain, Louvain La Neuve, Belgium.

Movies & Software:

- Attia, S., (2011) ZEB v.1, computer program Zero Energy Building Optimisation (copyright request in process)
- Attia, S., (2009) EzyPV, v.1, computer program for Sizing Photovoltaic Systems during Early Design A Decision Tool for Architects (copyright request in process)
- Attia, S., (2005) My Heart is VINEX Location, 5 minutes video
- Attia, S., (2005) Kolonisation, 15 minutes video

Unpublished

- Islamic design in the Western world and Western design in Islamic world, submitted to Design Theory Course, Wageningen Uni., 2005.
- Old Cairo Development Project, Source: Dr. Mona Zakareya, 2003 (Arabic)

Seminar/Conference Presentations:

- Attia, S., Mlecnik, E. & Loon, S. (2012) Principles for nearly zero energy building in Belgium, World Sustainable Energy Days, 29 February 2012 in Wels/Austria.
- Attia, S., De Herde, A., (2011) Early design simulation tools for net zero energy buildings: a comparison of ten tools, International Building Performance Simulation Association, November 2011, Sydney, Australia.
- Attia, S., Hamdy, M., Samaan, M., De Herde, A., Hensen, J., (2011) Towards strategic use of BPS tools in Egypt, International Building Performance Simulation Association, November 2011, Sydney, Australia.
- Attia, S., De Herde, A., (2011) Design Decision Tool for Zero Energy Buildings, Passive and Low Energy Architecture, July, Louvain La Neuve, Belgium.
- Attia, S., De Herde, A., (2010) Towards a Definition for Zero Impact Buildings, Sustainable Buildings CIB 2010, Maastricht, Netherlands.
- Attia, S., De Herde, A., (2010) Aiming Zero Impact Buildings: Mondo Solar-2002, A case study in Belgium, Sustainable Buildings CIB 2010, Maastricht, Netherlands.
- Weytjens, L., Attia, S et al. (2010) A comparative study of the 'architect-friendliness' of six building performance simulation tools, Sustainable Buildings CIB 2010, Maastricht, Netherlands.
- Attia, S., De Herde, A., (2010) Sizing Photovoltaic Systems during Early Design A Decision Tool for Architects, American Solar Energy Society, May 2010, Arizona, USA
- Attia, S. (2010) Zero Energy Retrofit Case Study of a Chalet in Ain-Sukhna, EGYPT, American Solar Energy Society, May 2010, Arizona, USA
- Attia, S. (2010) Active solar retrofit of a residential house, a case study in Egypt, American Solar Energy Society, May 2010, Arizona, USA
- Attia, S., De Herde, A., (2009) Bioclimatic Architecture Design Strategies in Egypt, 8th International Conference on Sustainable Energy Technologies, August 2009 Aachen, Germany
- Attia, S., Beltrán L., De Herde, A, Hensen, J., (2009) "Architect Friendly": A comparison of ten different building performance simulation tools, International Building Performance Simulation Association, July 2009, Glasgow, UK
- Attia, S., De Herde, A., (2009) Impact and potential of community scale low-energy retrofit: case study in Cairo , Smart and Sustainable Built Environments Conference, June 2009, TU-Delft , The Netherlands
- Attia, S. (2009) A Decision Tool for Zero energy Buildings in Egypt, 5th PhD symposium, TU Eindhoven, April 16th, 2009
- Attia, S. (2005) Energy Plantage, Leeuwarden: Look and feel, In Grounds for Change: Bridging energy Planning and spatial design strategies, Dam, F. van, Noorman, K.J.,– Groningen: KNN Milieu B.V., Pp. 67-75

Poster Presentations:

- Attia, S., De Herde, A., (2011) Defining Zero Energy Buildings from a Cradle to Cradle Approach, Passive and Low Energy Architecture, July, Louvain La Neuve, Belgium.
- Attia, S., Duchhart, I., (2011) Bioclimatic landscape design in extremely hot and arid climates, Passive and Low Energy Architecture, July, Louvain La Neuve, Belgium.
- Attia, S., De Herde, A., (2010) Strategic Decision Making For Zero Energy Buildings in Hot Climates, EuroSun 2010, Graz, Austria.
- Athienitis, A., Attia, S et al. (2010) Strategic Design, Optimization, and Modelling Issues of Net-Zero Energy Solar Buildings, EuroSun 2010, Graz, Austria.
- Attia, S. (2009) Bioclimatic landscape design strategy: Bioclimatic-zone Concept for site planning in arid climates, Smart and Sustainable Built Environments Conference, June 2009, TU-Delft , The Netherlands
- Attia, S., De Herde, A., (2009) Designing the Malqaf for summer cooling in low-rise housing, an experimental study, Passive and Low Energy Architecture, June 2009, Quebec, Canada
- Attia, S., Mahmoud, A., Green Roofs in Cairo: A Holistic Approach for Healthy Productive Cities, Greening Rooftops for Sustainable Communities, June 2009, Atlanta, USA
- Attia, S., The Bioclimatic Zones Concept, Students Research Week, Texas A&M, 18 March 2008
- Attia, S., The role of landscape design in improving the microclimate in traditional courtyard buildings in hot arid climates, Geneva Switzerland, PLEA 2006.
- Attia, S., The Plantage Project, Grounds for change, Energy Valley, Groningen, The Netherlands, May 2005

Invited Presentations

- Attia, S., Achieving Informed Decision Making for Net Zero Energy Building, EPFL, LIPID, 19 April 2012, Lausanne, Switzerland.
- Attia, S., Net Zero Energy Buildings, UTSA, COA, 24 February 2012, San Antonio, USA.
- Attia, S., Net Zero Energy Buildings and the EPBD in Belgium, ULB, 22 February 2012, Brussels, Belgium.
- Attia, S., Smart and Bioclimatic Architecture, TU-Delft, 03 February 2012 in Delft/The Netherlands.
- Attia, S. and Mlecnik, E., Principles for nearly zero energy building in Belgium, World Sustainable Energy Days, 29 Feb.2012 in Wels/Austria.
- Nearly and Net Zero Energy Building, SISCO & Antwerp Provincial Centre Sustainable Building and Living 25 May 2011, Westerlo, Belgium
- Guest Lecture, Introduction to LEED, Building for the Future (B4F), Brussels, Belgium, December, 2010
- Guest Lecture, Net Zero Energy Buildings, Mondo, Berlaar, Belgium, December, 2010
- Webinar, Architect Friendly BPS tools, Texas A&M - ARCH 628 students, 27 April 2010
- Webinar, Architect Friendly BPS tools, Texas A&M - ARCH 628 students, 03 December 2009

- Radio Campus, Radio Broadcast, Sustainable buildings and how to approach the public? , Louvain La Neuve, 4 December 2008
- Guest Lecture, Bamboo Architecture, Texas A&M, ARCH 624, 8 April 2008
- Guest Lecture, Renewable Energy, Rock Prairie Elementary School, Third grade students, 7 April 2008
- Guest Lecture, Solar Decathlon, Rock Prairie Elementary School, College Station, Texas, 7 April 2008
- Guest Lecture, Landscape Based Architecture, Texas A&M, ARCH 624, 18 March 2008
- Guest Lecture, Living Autarkie, Texas A&M, ARCH 628, September 2007
- Guest Lecture, Introduction to Landscape Architecture, Faculty of Fine Arts, Cairo, Egypt, April, 2007
- Guest Lecture, Concept Development, Faculty of Fine Arts, Cairo, Egypt, February 2007
- Guest Lecture, Islamic Architecture Elements, Faculty of Fine Arts, Cairo, Egypt, October 2006

Scientific Activities & Workshops

- Towards Nearly Zero Energy Buildings: Definition of common principles under the EPBD Workshop, 24th of Sept.2012, Brussels, Belgium
- EDUCATE Symposium, Architecture et Climat, 31 May, Louvain La Neuve, Belgium
- Net Zero Energy Solar Buildings, 7th IEA Task 40 / Annex 52 experts meeting, May, 2012 in Naples, Italy
- LEED Pilot Credits, LEED Interpretations and CIRs. Webinar, USGBC, 25 April 2012.
- Cradle to Cradle Lab, TU-Delft, 04 April 2012 in Delft/The Netherlands.
- Formation Bioclimatique & Construction Durable, Conseil Régional de l'Ordre des Architectes, 30 March 2012 in Casablanca/ Morocco.
- Cradle to Cradle in Design and Business, University of Twente, 09 March 2012 in Enschede/The Netherlands.
- Nearly Zero Energy Buildings Conference, World Sustainable Energy Days, 29 February 2012 in Wels/Austria.
- Etanchéité à l'air, 27 January 2012, Confédération Construction Bruxelles-Capitale, Uccle, Brussel, Belgium
- Isolation acoustique, 26 January 2012, Confédération Construction Bruxelles-Capitale, Brussel, Belgium
- Visite - Renovation durable, 20 December 2011, Confédération Construction Bruxelles-Capitale, Uccle, Brussel, Belgium
- Thermal Bridges for EPB and Passive House, 12-13 December 2011, PHPP, Heusden-Zolder, DUBO, Belgium
- Air tightness and Infrared Thermography, 1 December 2011, CSTB, Limelette, Belgium
- IBPSA 2011, 12th International Building Performance Simulation Association Conference, 14-16 November 2011, Sydney, Australia
- ASHRAE Benelux workshop, 10 November 2011, Brussels, Belgium
- BPIE report presentation on European Buildings under the Microscope – a country by country review of the energy performance of European buildings Study, 10 November 2011, Brussels, Belgium
- BPIE report presentation on Nearly Zero Energy Building principles study, 09 November 2011, Brussels, Belgium
- Net Zero Energy Solar Buildings, 6th IEA Task 40 / Annex 52 experts meeting, September, 2011 in Basel, Switzerland
- eCAADe Conference, September 2011, Ljubljana, Slovenia
- eCAADe PhD Workshop Grant, September 2011, Ljubljana, Slovenia
- PLEA 2011, International Conference on Passive and Low Energy Architecture, Louvain La Neuve, 13-15 July 2011, Belgium
- Using Standard 90.1 to Meet LEED, McHenry Wallace, Joseph Deringer, ASHRAE, June 26 2011, Montreal, QC, Canada
- ASHRAE Summer Meeting, June 25-29 2011, Montreal, QC, Canada
- IEA Task40 Summer School, 18-23 June 2011, Concordia University Montreal, QC, Canada
- Stakeholder Consultation on nearly Zero Energy Building principles study, 10 May 2011, Brussels, Belgium
- Michael Braungart Symposium, TU-Delft, 15 April, 2011 Delft, The Netherlands
- EU Sustainable Energy Week, April, 2011 in Brussels, Belgium
- Net Zero Energy Solar Buildings, 5th IEA Task 40 / Annex 52 experts meeting, April, 2011 in Golden, Colorado, USA
- Automatic Architecture Workshop, TU-Delft, 15-17 December, Delft, Netherlands
- DesignBuilder Workshop, (Mahabir Bhandari), 13-14 December 2010, Brussels, Belgium
- Net Zero Energy Solar Buildings, 4th IEA Task 40 / Annex 52 experts meeting, September, 2010 in Graz, Austria
- Weatherization & Energy Efficiency Improvements in existing homes, Moncef Krarti, ASES, 21 May 2010, Arizona, USA
- Tool Day, SBSE, ASES 2010, American Solar Energy Society Conference, 22 May 2010, Arizona, USA
- ASES 2010, American Solar Energy Society Conference, 17-22 May 2010, Arizona, USA
- Net Zero Energy Solar Buildings, 3rd IEA Task 40 / Annex 52 experts meeting, May, 2010 in Reunion Island, France
- National Denk Tank 2009, report presentation 'Energie in beweging', December 2009, The Netherlands
- Facing the Open City Workshop, A Debate on Current Urban Realities, Nuffic Alumni Conference 2009 – The Hague, Netherlands
- Net Zero Energy Solar Buildings, 2nd IEA Task 40 / Annex 52 experts meeting, October, 2009 in Wuppertal, Germany
- EnergyPlus Workshop, (Drury Crawley) (IBPSA) Conference, 31 July -1 August 2009, Glasgow, Scotland
- IBPSA 2009, 11th International Building Performance Simulation Association Conference, 27-30 July 2009, Glasgow, Scotland
- Architecture and Sustainability, Architects' Council of Europe Seminar, 24th September 2009, Brussels, Belgium
- Sustainable Design & Construction Workshop, (Kees Duijvestein, Tjerk Reijenga, Peter Teeuw), KOW, The Hague, June 2009, Netherlands
- SASBE 2009, Smart and Sustainable Built Environments Conference, 16-19 June 2009, TU-Delft, The Netherlands
- International Symposium, Developing Countries Facing Global Warming: A Post-Kyoto Assessment, RAOs, Brussels, 12-13 June, 2009
- 5th PhD symposium, TU Eindhoven, April 16th, 2009
- PLEA 2008, International Conference on Passive and Low Energy Architecture, Dublin Ireland, 22-24 October 2008
- IBPSA-NVL 2008 Event: "Gebouwsimulatie: De Praktijk & De Ontwikkelingen" TUEindhoven, Oktober 9th, 2008
- Gulf Coast Green 2008 Conference and Expo, Innovations in Building for Hot and Humid Climates, Houston, April 3-6, 2008
- Texas A&M Sigma Xi Symposium, Bio fuels: Do they have a future? College Station, March 26, 2008
- Texas A&M Student Conference on National Affairs, Creating a Sustainable Global Energy Policy, College Station, Feb 21, 2008
- Texas A&M Student Research Week, March 2008
- Texas A&M Global Symposia, Research on the Built & Virtual Environments, College Station, October 2007
- PLEA 2006, International Conference on Passive and Low Energy Architecture, Geneva Switzerland, 6-8 September 2006
- International Seminar, Sustainable Building, Wageningen, The Netherlands, April 2006
- Charette & Design Workshop, Grounds for change, Energy Valley, Groningen, The Netherlands, May 2005
- A 12 minutes movie for a design proposal submitted for the "Kolonisation" Atelier, Wageningen, The Netherlands, April 2005
- Participation in UIA & Society of Egyptian Architects Conference "Architecture & Cultural Identity" Bilb. Alexandria, Egypt, April 2004
- Participation in "Archiprix International" workshop for the best graduation projects in Istanbul, Turkey June 2003
- Participation in 4th Conference "Globalization and Fine Arts" in the Faculty of Fine Arts, Cairo, Egypt, April 2003
- Participation in "The Egyptian Environmental Affairs Agency, Workshop for Landscape", Cairo, Egypt, Mars 1999

Ongoing Scientific Collaboration:

- University College Limburg (Dpt. of Arts & Architecture) – Hasselt University – Diepenbeek, Belgium (Lieve Weytjens)
- Laboratoire de Génie Industriel IUT Département Génie Civil Université de La Réunion, FRANCE (Francois Gard)
- Texas A&M University, School of Architecture, Architecture Department, College Station, USA (Liliana Beltran)
- Università degli di Palermo, Dipartimento di Ricerche Energetiche ed Ambientali, Palermo ITALY, Maurizio Cellura
- Dept. of Building, Civil and Environmental Engineering, Concordia University, Montreal, CANADA, Andreas Athienitis
- Politecnico di Milano , Energy Department - eERG end-use Efficiency Research Group, Milano, ITALY, Salvatore Carlucci
- MEARU, Mackintosh School of Architecture, Glasgow, UK, Masa Noguchi

- Helwan University, Faculty of Fine Arts Architecture Department, Cairo, Egypt

PROFESSIONAL DEVELOPMENT

Technical – Faculty of Fine Arts, Helwan University: Environmental Design & Planning • Theories & Trends of Environmental Design Sustainable Environmental Systems • Environmental Critique & Evaluation of Designs Natural & Artificial Lighting • Architectural Aerodynamics Design • Alternative Renewable Energy Development of Hot-Climate Areas • Academic Analysis • Technical Engineering Writing

Technical – Landscape Architecture Chair Group, Wageningen University: Landscape Design & Planning • Theories & Trends of Landscape Design • Urban Landscape Architecture • Delta Climate Design • Dutch Landscape Architecture • Landscape Design and Micro Climate • Planting Design • Architectural Research Methods • Advanced Research Methods

Technical – Architecture Department, TU-Eindhoven University: Building Performance Simulation

Technical – School of Architecture, Texas A&M University: Tools for Green Building Design • Applied Solar Energy • Energy Conservation in Residential Buildings • Energy Optimization of Building Design • Architectural Lighting • Sustainable Urbanism • Environmental Systems • Sustainable Urbanism • Theory of Place making • Research Ideology for Architecture

Technical – Université Catholique de Louvain: • Air tightness and Infrared Thermography, 1 December 2011, CSTB, Limelette, Belgium • Passive House Calculation, 14-15 December 2011, PHPP, Heusden-Zolder, DUBO, Belgium • Thermal Bridges for EPB and Passive House, 12-13 December 2011, PHPP, Heusden-Zolder, DUBO, Belgium

Professional - Helwan University, Faculty and Leadership Development Program • Communication Skills course (15 hours, November 2006)

- Creative Thinking Skills course (15 hours, November 2006)

Professional - Texas A&M University, Employees Workshops • Workplace Etiquette • Presentation Skills • Telephone Courtsey • Preparing for Global Workplace and Business Communication Skills (Spring 2008)

Professional - Université Catholique de Louvain, Employees Workshops • Evaluate service activities • Communication and negotiation

- Leading a business meeting (April 2009)

Professional - Facultés Universitaires Catholiques de Mons, Doctoriales Franco-Belges 2010, Jeune Chercheurs, Innovez dans l'entreprise et les services, Mons, (13-18 juin 2010)

Academic - Helwan University, Faculty & Leadership Development Program • Effective Teaching Skills course (20 hours, November 2006)

Academic - Texas A&M University, Teaching Assistant Training & Evaluation Program at the Center for Teaching Excellence • Syllabus construction • Effective classroom management • Teaching in culturally diverse classroom • Class assessment techniques (August 2007)

Academic - Université Catholique de Louvain, Educational Training • Course & Syllabus Design (20 hours, November 2008) • Setting up an giving lectures (15 hours, November 2008) • Voice training (5 hours, November 2008) • Supervising Master students (5 hours, November 2008) • Teaching & learning in higher education (20 hours, January 2009) • Coaching students (8 hours, January 2009) • Peer coaching (8 hours, May 2009)

Research - Helwan University, Faculty & Leadership Development Program • Scientific Research Skills course (20 hours, November 2006)

Research - TU Delft University, Workshops • Networking, NWO Talent Classes, (December 2009) • Personal Career Research Grants Day, Valorisation Centre TU Delft 5 hours (5 hours, April 2010) • Managing your career as a PhD Classes (April 2010) • How to formulate a successful project proposal, Valorisation Centre TU Delft (24 hours, April 2010) • ERC starting Gants Training, Valorisation Centre TU Delft (6 hours, June 2010)

PUBLICATION OF WORK BY OTHERS

List publications by others about my work

- Attia, S., Beltrán L., De Herde, A, Hensen, J., (2009) "[Architect Friendly": A comparison of ten different building performance simulation tools](#), International Building Performance Simulation Association, July 2009, Glasgow, UK **(15 citations)**
- Athienitis, A., Attia, S et al. (2010) Strategic Design, Optimization, and Modelling Issues of Net-Zero Energy Solar Buildings, EuroSun 2010, Graz, Austria. **(5 citations)**
- Attia S. (2010) [Building Performance Simulation Tools: Selection Criteria and User Survey](#), Technical Report, Architecture et Climat, Louvain La Neuve: Université catholique de Louvain. **(2 citations)**
- Attia S. (2011) [State of the Art of Existing Early Design Simulation Tools for Net Zero Energy Buildings: A Comparison of Ten Tools](#), Technical Report, Architecture et Climat, Louvain La Neuve: Université catholique de Louvain. **(2 citations)**
- Attia, S. (2010) [Zero Energy Retrofit Case Study of a Chalet in Ain-Sukhna](#), EGYPT, American Solar Energy Society, May 2010, Arizona, USA **(1 citation)**

CONTINUING EDUCATION

Environmental Design and Construction Understanding Green Schools (Mars 2010) • Managing LEED Documentation (April 2010)

- Facade Stabilisation Solutions (April 2010) • Solar Roofing Systems (May 2010) • Cool Roofing (September 2010) • Sound Isolation (November 2010)

EXHIBITIONS & WEBSITES

- Preparing for "Egypt's Traditional & Spontaneous Architecture Exhibition", Cairo, Egypt, May 2004
- Organizing the Archiprix Exhibition for the best architectural graduation projects for the Faculties of Fine Arts of Egypt, 6-14 December 2006
- Organizing the Archiprix Exhibition for the best architectural projects Design Studio I, Faculty of Fine Arts of Egypt, 26-03 April 2007
- Texas A&M, Architecture Dept. Webmaster with Dr. Wei Yan, Fall 2007
- Contributor to Carboun Website, <http://www.carboun.com/>, January 2010 – Present
- Founder of BEEIE and BEERE Group and Website, January 2011

AWARDS, FELLOWSHIPS & ACADEMIC HONORS

- World Sustainable Energy Days, Scientific Committee Award (2012), 29 February 2012 in Wels/Austria.
- Student Travel Award, International Building Performance Simulation Association, (1000\$) 14-16 November 2011, Sydney, Australia
- eCAADe PhD Workshop Grant, (550€) September 2011, Ljubljana, Slovenia
- Special Nomination PLEA Conference 2011 Best Poster Award. Bioclimatic landscape design in extremely hot and arid climates, Louvain La Neuve, Belgium
- The School of Engineering PhD Award (4000 €), January 2011, UCL-Louvain La Neuve, Belgium
- Best Student Paper Award, SBSE and ASES, (600\$) May 2010, Arizona, USA
- Student Travel Award, SBSE and ASES, (500\$) May 2010, Arizona, USA
- The School of Engineering PhD Award (2500 €), February 2010, UCL-Louvain La Neuve, Belgium
- Student Travel Award, International Building Performance Simulation Association, (800\$) July 2009, Glasgow, UK

- Best Paper Presentation, Smart and Sustainable Built Environments Conference, June 2009, TU- Delft, The Netherlands
- Catholic University of Louvain Cooperation and Development Fellowship, financing the PhD's degree 2008-2011
- Best Posters, Student Research Week (2008) March 2008, Texas A&M
- Texas A&M Architecture Department Scholarship 2007-2008
- Best Teaching Assistant 2006-2007, Architecture Dept., Faculty of Fine Arts, Helwan University
- The Netherlands Fellowship, financing the Master's degree 2004-2006
- First Prize (Africa), Archiprix International for best Graduation Projects
- Selected as Best Graduation Project Egypt, 2002 to participate in "Archiprix International" Istanbul, Turkey June 2003
- University of Helwan, Ideal Student for the Year 2000, 2001

MEMBERSHIP

- Amnesty International, Member since 2012
- European Council for Energy Efficient Economy (eceee), Member since 2010
- Association of Collegiate Schools of Architecture (ACSA), Member since 2010
- American Solar Energy Society (ASES), Member since 2010
- Egyptian Earth Construction Association (EECA), Member since 2010
- Society of Building Science Educators (SBSE), Member since 2008
- LEED Accredited Professional and USGBC, Member (Texas A&M) since 2008
- Emerging Green Builders (EGB) Member since 2007
- IESNA, Member since 2007
- American Society for Heating Refrigeration, Air conditioning and ASHRAE, Member since 2007
- Dutch Licensed Architects Register, Member since 2006
- Egyptian Society for Architects & Egyptian Syndicate for Engineers, Member since 2003

DRAWING SKILLS

Pencil, Color Pencils, Pen & Ink and Water Colours

COMPUTER SKILLS

Architecture: AutoCAD (2D & 3D) • Sketch Up & ArchiCAD • Arch View 3.2 (GIS)
Energy Simulation: Design Builder • ECOTECT • Weather Tools • Climate Consultant • Energy 10 • E-Quest • Radiance • DaySim • HEED •
 Familiarity with TRNSYS • ESP-r • Energy Plus • IES/VE • Therm
Graphics and Web Design: Adobe Photo Shop • Illustrator and Premiere • Corel Draw • Dreamweaver-CSS • Flash
Software Programming: Visual Basic
Editing & Presentation: In Design • Endnote • Microsoft Applications (International Computer Driving License (ICDL), 2004)

LANGUAGES

- English (Very Good) (Academic IELTS 7.5, 2005 + GRE V:300, Q:610, A:3.5, 2006)
- German (excellent) ([Deutsches Sprachdiplom. DEO](#) 1997)
- French (Good) (DELTA, 2004) (TEF 2006, Niv. Intermédiaire) (Français Niv. Avancé, 2008-2010, Université catholique de Louvain Belgique)
- Dutch (Good) (Upper Intermediate 2004-2006 & 2008-2010)
- Arabic (mother tongue)

HOBBIES

- Photographing • Aquarelle Painting • Bicycling • Arabic Calligraphy • Model Construction • Travelling (Europe and North Africa)

MISCELLANEOUS

- US, Dutch and Egyptian driving licenses • International Defensive Driving • Private Teacher, Primary & secondary level students DEO (German School) in Cairo

COMMITTEE/VOLUNTEER EXPERIENCE

- Habitat for Humanity, USA, [Construction Building Site, College/Bryan](#) - Texas Angels Gate subdivision, Feb 2008
- Habitat for Humanity, Egypt, Construction Building, Minya Rural Neighbourhood, June 2004
- LEED Fellow Focus Groups
- Member of the ongoing and steering committee of [PLEA 2011](#)
- ASHRAE Standards Project Committee (SPC 189.1) — Standard for the Design of High-Performance Green Buildings, August 2011
- ASHRAE Technical Committee (TC4.7) - Energy Calculations, August 2011
- Session Chair, International Conference PLEA 2011, Louvain La Neuve, Building Assessments

References & Portfolio furnished upon request

The CV is available in pdf format with active hyperlinks from: <http://www.uclouvain.be/perso/shady.attia>

REFERENCES

Professor [Andre De Herde](#), < andre.deherde@uclouvain.be >
School of Architecture, Universite Catholique de Louvain
Architecture et Climat, Louvain La Neuve, Belgium
Telephone: 0032 104 723 34

Professor [Liliana Beltran](#), < LBeltran@archmail.tamu.edu >
School of Architecture, Texas A&M University
College Station, TX 77843, USA
Telephone: 001 979 845 6545

Professor [Jan Hensen](#), < j.hensen@tue.nl >
School of Architecture, TU-Eindhoven
P.O. Box 513 - Vertigo 6.18
5600 MB EINDHOVEN, Netherlands
Telephone: +31 402 472 988

Professor [Ingrid Duchhart](#), < ingrid.duchhart@wur.nl >
Chair Group Landscape Architecture
Wageningen , Droevendaalsesteeg 3
6708 BP, Wageningen, the Netherlands
Telephone: +31 317 488240

Professor [Andreas Athienitis](#) < aathieni@encs.concordia.ca >
Scientific Director, NSERC Smart Net-zero Energy Buildings Strategic Research Network
Professor and Concordia Research Chair Tier I
Dept. of Building, Civil and Environmental Engineering
Concordia University, 1455 Maisonneuve W.
Montreal, Quebec, Canada, H3G 1M8
Tel. 514-848-2424 Ext. 8791, Fax 514-848-7965

Professor [Michael Neuman](#) <neuman@archone.tamu.edu >
Department of Landscape Architecture and Urban Planning
Texas A & M University, MS 3137
College Station, Texas 77843-3137
Telephone: 979 845 7062