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### **1.1 EDUCATION**

**Ph.D.**, University of Pennsylvania, 2009.

Major: City and Regional Planning

Field of Specialization: Sustainable Design and Planning

Dissertation Title: *A framework for Energy Performance Indicators: Applying the Composite Indicator Method to a University Campus*

**Masters of City Planning (M.C.P)**, University of Pennsylvania, 2000.

Major: City Planning

**B.Sc.**, Alexandria University, 1994.

Major: Architecture

### **1.2 POSITIONS HELD PRIOR TO AUC**

#### **Academic - School or University**

Assistant Professor, The Arab Academy for Science and Technology - Alexandria. (September 4, 2010 - September 15, 2012).

### **1.3 LICENSURES AND CERTIFICATIONS**

The Qatari Sustainability Assessment System (QSAS) – Certified QSAS CGP Professional, BARWA and Qatari Diar Research Institute (BQDRI). (December 12, 2010 - Present).

Leadership for Energy and Environmental Design Accredited Professional (LEED AP # 10024543), The United States Green Building Council (USGBC). (June 28, 2009 - Present).

Egyptian Engineering Syndicate # 7523046, Egyptian Engineering Syndicate. (June 15, 1994 - Present).

## 1.4 PROFESSIONAL MEMBERSHIPS

**Member**, The International Building Performance Simulation Association (September 2005 – present).

**Member**, The International Building Performance Simulation Association – Egypt local chapter (September 2013 – present).

**Member**, Biophilic Design Educators Network. (October 15, 2018 - Present).

**University Country Liaison and Member**, American Institute of Architects - Middle East. (April 2, 2017 - Present).

**Member**, Society of Building Science Educators. (January 21, 2017 - Present).

**Member**, Engineers without Borders. (January 16, 2017 - Present).

**Co-Founder and Member**, Egypt Green Building Council (EGGBC). (January 1, 2014 - Present).

**Member**, United States Green Building Council. (January 1, 2009 - Present).

**Technical Adviser and Member** - Association for the Advancement of Sustainability in Higher Education. (March 1, 2011 - Present).

**Associate Member**, The Architectural Engineering Institute. (January 16, 2017 - Present).

**Associate AIA Member** (#38691538), The American Institute of Architects. (September 2015 – present)

**Member**, Society for College and University Planning. (October 1, 2013 - October 1, 2015).

**Member** (#180960), The Project Management Institute (PMI). (October 1, 2010 - October 1, 2012).

## 1.5 DEVELOPMENT ACTIVITIES ATTENDED

**Workshop**, "Gouna workshop on Urban Heat Island measurement," Freie Universität Berlin, Berlin, Germany. (December 18, 2018 - December 22, 2018).

**Workshop**, "Gouna workshop on Urban Heat Island measurement," Freie Universität Berlin, Berlin, Germany. (December 19, 2017 - December 20, 2017).

**Workshop**, "Downtown Cairo Regeneration Project (DCR)," OHK Consultants, Cairo. (May 15, 2017 - May 16, 2017).

**Workshop**, "Ecosystems Services in Informal Areas of Cairo," RISE, AUC, New Cairo, Egypt. (February 26, 2017).

**Workshop**, "Global Lab to Market Forum", Scientific Affairs - U.S. Embassy Cairo, Cairo, Egypt. (December 6, 2016 - December 7, 2016).

**Seminar**, "Teaching Enhancement Certificate I" Classroom Learning Technologies, Cairo, Egypt. (May 3, 2016).

**Study Visit**, "*ERECI - Cluster Visit in Barcelona and Valencia*," Barcelona, Spain. (November 23, 2015 - November 28, 2015).

**Seminar**, "*Doing Things Differently: Alternative Forms of Assessment*," Center for Learning and Teaching. (February 18, 2015).

**Faculty Training**, "*Green Innovation - Renewable Energies*," Technical University of Graz, Graz, Austria. (September 8, 2014 - September 12, 2014).

**Faculty Training**, "*Pro-Green Diploma Training*," AUC, Turin, Italy. (June 5, 2014 - June 9, 2014).

**Faculty Annual Meeting and Training**, "*ProGreen Training on Course Development*," The American University in Beirut, Beirut, Lebanon. (January 9, 2014 - January 12, 2014).

**Workshop**, "*Architecture and Vision – From Pyramids to Spacecraft*," The American University in Cairo and the Italian Consulate, New Cairo, Egypt. (November 19, 2012 - November 26, 2012).

## 1.6 AWARDS AND HONORS

- **Nomination for Excellence Award in Academic Service** (2019), American University in Cairo.
- **Egypt Awards Ambassador** supporting the LafargeHolcim Awards for Sustainable Construction. Source: < <https://www.lafargeholcim-foundation.org/experts/khaled-tarabieh>>
- **Top Peer Reviewer Award** by Publons (2018), Award Category: Environment/Ecology
- **Jeffery Cook Award** 2018 -The Society of Building Science Educators (SBSE).
- **Country Ambassador**, Lafarge Holcim Foundation. (December 1, 2016 - Present).
- **Course Development Award**, "Cairo in the curriculum supported by the Mellon Foundation" (2015).
- **ELP Fellowship**: Selected as one of 21 emerging leaders from the Delaware Valley Region (PA-NJ-DL) for a prestigious year-long fellowship program, "Environmental Leadership (ELP) Program" aimed at enhancing the capacity of the environmental movement - Class of 2008.

## 2 TEACHING

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### 2.1 TEACHING EXPERIENCE

**2.1.1 American University in Cairo, Assistant Professor of Sustainable Design, September 2012 – Present.**

**Core courses for credit offered in the Bachelor of Science in Architectural Engineering program (16-week term)**

	Course Name	Course Type	Number of Credits	Number of offerings
	<b>ARCH Courses (including multiple sections)</b>			
1	ARCH 453/3554 - Architectural Design Studio III	Core	4 credits	24
2	ARCH 441/4421 - Professional Practice, Design Management and Codes	Core	2 credits	5
3	ARCH 456/4557 - Architectural Design Studio VI Design Studio Contextual	Core	4 credits	2
4	ARCH 490/4980 - Senior Project I	Core	2 credits	7
5	ARCH 491/4981 - Senior Project II	Core	5 credits	10
6	ARCH 480/4920 - Special Problems in Architectural Engineering	Elective	1-3 credits	5

**Non- Credit Online courses offered at the School Level to professionals (12 week)**

**PROGREEN**, Online diploma for Professionals. <http://www.progreendiploma.com/>

PRGR 602: Core course: Green Technologies, System Approach to Sustainability and Management, Offered 15 times since Spring 2014. (Average enrollment 15 students per offering)

PRGR 637: Elective: Green Building Basics and Building Rating Practices. Offered 3 times

**Non- Credit on campus courses offered at the School Level to professionals (12 week)**

Training Course, The American University in Cairo - Facade Engineering Courses, 21 participants.

**Non- Credit on campus courses offered at the School Level to professionals (6-day course)**

Training Course, the American University in Cairo - ESS LEED GA Course for Beginners. Total number of trained professionals = 160 participants. (September 21, 2014 - Present).

**2.1.2 The Arab Academy for Science, Technology and Maritime Studies, Assistant Professor of Architecture and Urban Planning, Architectural Engineering and Environmental Design Department, Alexandria Egypt, September 2010 – August 2012.**

**Undergraduate Course Work:**

AR 362: Environmental Studies 1  
 AR 312: Architectural Design 2  
 AR 415: Architectural Design 5  
 AR 353: Building Technology 3  
 AR 456: Execution Design 2  
 AR 501: Graduation Project  
 AR 516: Architectural Design 6

**Graduate:**

AR 721: Passive and Active Environmental Control Systems,  
 AR 713: Environmental studies in Architectural & Urban Design

**2.1.3 Drexel University, Goodwin College of General Studies. Adjunct Assistant Professor,** Construction Management Department, Philadelphia, PA, USA. March 2010 – August 2012.

**Online Certificate in Construction Management, Graduate Level:**

CMGT546: Sustainable Technologies  
CMGT535: Community Impact Assessment

**2.1.4 University of Pennsylvania, Penn Design, City and Regional Planning. Graduate Teaching Assistant. (September 1997 – 2004)**

CPLN 661: Site Planning  
CPLN 760: Case Studies in Urban Design

**2.1.5 Alexandria University, Faculty of Engineering, Department of Architecture. Teaching Assistant. (September 1994 – 1996)**

Fourth Year: Thesis Design Studio  
Third Year: Design Studio  
Third Year: Construction and Working Drawings  
First Year: Sciagraphy and Perspectography

## 2.2 DIRECTED STUDENT LEARNING

**Doctoral Thesis Advisor**, "*Sustainable Water Systems and Management*," by: Esraa El-Azab, PhD Candidate, University of Mansoura, Department of Architecture. (February 28, 2019 - Present).

**Doctoral Thesis Advisor**, "*Human behavior affecting sustainable architecture in Egypt-Campuses as a Field study*," by: Sarah Khalil, PhD Candidate, University of Kafr El Sheikh, Department of Architecture. (Scheduled Defense September 23, 2019).

**Master's Thesis Advisor**, "*Quantifying the value of a green roof addition for existing buildings in Egypt*," by: Sara El Naggar, Arab Academy for Science, Technology and Maritime Transport (AASTMT), Architecture and Environmental Design Department, Alexandria, Egypt. (June 1, 2017 - October 16, 2018).

**Master's Thesis Reader/Examiner**, "*The Impact of Urban Sprawl in the Fragmented Agricultural Lands: A Case Study of Tersa, Giza*", by: Aya Youssef, American University in Cairo, the Center for Sustainable Development (CSD). (November 1, 2015 - July 29, 2018).

**Master's Thesis Reader/Examiner**, "*The Implementation of BIM Towards Sustainable Construction Industry in Egypt*," by: Amira ElShazly, American University in Cairo, Construction Engineering Department. (February 1, 2016 - May 31, 2018).

**Master's Thesis Advisor**, "*Alexandria Green Network Plan - A study proposal for designing and applying green network plan in Alexandria City, Egypt*," by: Mohamed ElGouny, Anhalt University of Applied Sciences, Germany. (July 7, 2017 - November 15, 2017).

**Master's Thesis Advisor**, "*Energy Retrofit Decision Support Model for Existing Educational Buildings in Egypt*," by: Rania El-Tahan, American University in Cairo, Construction Engineering Department. (January 1, 2015 - September 10, 2017).

- Master's Thesis Reader/Examiner**, "*Cairo's New Administrative Capital Wedian City: Lessons from the Past and for the Future*", by: Mirette Khorshid, Massachusetts Institute of Technology, USA. (July 1, 2015 - December 8, 2016).
- Master's Thesis Reader/Examiner**, "*A Sustainable Complex Fenestration System using Recycled Plastics*", By: Islam Mashaly, American University in Cairo, Construction Engineering Department. (June 12, 2016 - July 4, 2016).
- Master's Thesis Advisor**, "*Rating System for a Touristic Green Community in Egypt*", By: Nour Darwish, Arab Academy for Science, Technology and Maritime Transport (AASTMT), Architectural Engineering and Environmental Design Department, Alexandria, Egypt. (February 1, 2014 - May 12, 2016).
- Master's Thesis Advisor**, "*Managing & Developing Existing Egyptian Hotels' Energy Performance*", by: Ahmed Adassy, Arab Academy for Science, Technology and Maritime Transport (AASTMT), Architectural Engineering and Environmental Design Department, Alexandria, Egypt. (February 1, 2014 - May 12, 2016).
- Master's Thesis Advisor**, "*Architectural Design Strategies to Convert Existing Buildings to Near Zero Energy with Market Available Solar Technologies in Egypt*", by: Somaya El Badri, American University in Cairo, the Center for Sustainable Development (CSD). (August 1, 2014 - January 15, 2016).
- Master's Thesis Advisor**, "*Evaluation of Green Building Rating Systems for Egypt*", by: Heba Karmany, American University in Cairo, the Center for Sustainable Development (CSD). (January 1, 2014 - March 1, 2016).
- Master's Thesis Advisor**, "*Impact of Urbanization on Urban Landscape Patterns- A GIS based study on Urban Centers*", by: Mai Mokhtar, Arab Academy for Science, Technology and Maritime Transport (AASTMT), Architectural Engineering and Environmental Design Department, Alexandria, Egypt. (September 1, 2013 - October 22, 2015).
- Master's Thesis Advisor**, "*Effect of Building Materials on Indoor Air Quality in Residential Buildings in Egypt: A Pre-Occupancy Assessment*", by: Dalia Wagdi, American University in Cairo, Construction & Architectural Engineering Department. (January 1, 2014 - March 1, 2015).
- Master's Thesis Advisor**, "*Using Building Information Modeling (BIM) Tools to Manage Integrated Project Delivery IPD Projects*", by: Ahmed Attia, Arab Academy for Science, Technology and Maritime Transport (AASTMT), Architectural Engineering and Environmental Design Department, Alexandria, Egypt. (January 1, 2011 - September 1, 2013).
- Master's Thesis Advisor**, "*Barrier Free Communities: A Case of a Sustainable Business District*", by: Hadeel El Naggat, Arab Academy for Science, Technology and Maritime Transport (AASTMT), Architectural Engineering and Environmental Design Department, Alexandria, Egypt. (November 1, 2010 - September 30, 2012).
- Master's Thesis Reader/Examiner**, "*Energy Efficient Configuration of Perforated Solar Screens for Residential Desert Buildings*", by: Rasha Arafa, American University in Cairo, Construction & Architectural Engineering Department. (September 10, 2012 - September 15, 2012).

## 2.3 COURSE DEVELOPMENT

**ARCH 3554 Sustainability in Architectural Design Course Development:** Founded the LEED Lab at The American University in Cairo, first in the Middle East and Africa and fourth in the world to train undergraduate students on LEED training hands-on in advance of graduation in association with the United States Green Building Council (USGBC) supporting the instruction of the course. Source: < <https://www.usgbc.org/articles/leed-lab-sustainability-higher-education-goes-global>>

**ARCH 3554 Sustainability in Architectural Design Course Development:** Implemented the HIVE Program (Harnessing Innovation through Virtual Exchange) with the University of Arizona. Launched 2017 with students from AUC and the University of Arizona (UA) to share a real time class instruction and collaboration through virtual exchange.

**ARCH 4221 Professional Practice, Design Management and Codes:** Implemented the IBC 2018, modified the exercises to be applied case studies related to the students' projects. Added more content regarding the American Disabilities Act (ADA) design considerations with focus on the needed requirements for egress, fire zones, assisted means of egress and the Egyptian local codes. One part of the course deals with the Professional practice, contracts and applications of payment, governing relationships between the design firm, contractor and client according to the American Institute of Architects documentation and legal forms.

**LEED® GA, v2009, v4 & v4.1 prep Course:** Water, Energy and Indoor Environmental Quality Categories

**SCI 1099:** "Cairo in the Curriculum – Sustainability in Cairo between theory and practice"

**PRGR 602:** "*Green Technologies, System Approach to Sustainability and Management*" online course offered part of the PRO-GREEN Diploma for Professionals.

**PRGR 637:** "*Green Building Basics and Building Rating Practices*" online course offered part of the PRO-GREEN Diploma for Professionals.

**CMGT546:** "*Sustainable Technologies*" online course offered part of the Construction Management certificate for Professionals.

**CMGT535:** "*Community Impact Assessment*" online course offered part of the Construction Management certificate for Professionals.

## 3 RESEARCH

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### 3.1 PUBLISHED INTELLECTUAL CONTRIBUTIONS

#### Reports

Mansour, Y., **Tarabieh, K.**, Khorshed, M., & Rothrock, B. (2019), *AUC Carbon Footprint 2019*, New Cairo, Egypt: American University in Cairo, (Khaled Tarabieh and Yasmin Mansour, Eds.). <http://www.aucegypt.edu/sustainability>

Mansour, Y., **Tarabieh, K.**, & S. Kondic (2017), *AUC Carbon Footprint 2017*, New Cairo, Egypt: American University in Cairo, (Khaled Tarabieh and Yasmin Mansour, Eds.). <http://www.aucegypt.edu/sustainability>

Rauch, M., **Tarabieh, K.**, Tutwiler, R., Jaskolski, T., Petrovich, A., & Estevez, C. (2015), *AUC Carbon Footprint 2015*, New Cairo, Egypt: American University in Cairo, (Marc Rauch and Khaled Tarabieh, Eds.). <http://www.aucegypt.edu/sustainability>

**Tarabieh, K.**, Elimam, A., & Sherif, A. (2015), ERECI - WP2: T2.3\_Analysis Results - Report.

**Tarabieh, K.**, & Elimam, A. (2015), ERECI WP2: Task 2.3 Mapping and SWOT Analysis.

Mostafa, M., Sherif, N., Sherif, A., Kamel, B., **Tarabieh, K.**, & C. Bauriedel. Architectural Engineering Program Strategic Plan Report to the UNESCO/UIA Validation Council (2013).

Mostafa, M., **Tarabieh, K.**, Vogler, A., & Vittori, A. (2013). *Cairo Green*, Cairo: Spirit Publications. [http://issuu.com/magdamostafa/docs/cairo\\_green](http://issuu.com/magdamostafa/docs/cairo_green)

### Book Chapters

Khorshid, M., **Tarabieh, K.**, & Vale, L., (2018), "Cairo's New Administrative Capital "Wedian City": A Necessity or Repeated History?", in *Cairo Desert Cities*, (M. Angelil, C. Malterre-barthes Eds, Eds.), Berlin, Germany: Ruby Press, 418. <http://www.ideabooks.nl/9783944074238-cairo-desert-cities>

### Edited Volumes

"*Ecocities in Challenging Environments - Taking the Vision Forward*", Costis Torgas & **Khaled Tarabieh**, Co-Chairs of the Academic Committee and Volume Eds. Proceedings of the Ecocity World Summit 2015 held on 11 - 13 October, 2015 ADNEC, Abu Dhabi, UAE. ISBN: 978-9948-18-687-8.

### Refereed Journal Articles

Fadel, C., & **Tarabieh, K.** (2019). Development of an Industrial Environmental Index to Assess the Sustainability of Industrial Solvent-Based Processes. *Resources*, 8(2), 115. <https://doi.org/10.3390/resources8020115>

**Tarabieh, K.**, Nassar, K., Abdel-Rahman, M. & Mashaly, I. (2019), Statics of space syntax: Analysis of daylighting, *Frontiers of Architectural Research*. <https://doi.org/10.1016/j.foar.2019.05.004> (Accepted – In press)

**Tarabieh, K.**, & Aboulmagd, A. (2019). Thermal performance evaluation of common exterior residential wall types in Egypt. *Buildings*, 9(4). <https://doi:10.3390/buildings9040095>

**Tarabieh, K.**, & Khorshed, M. (2019). Optimizing evaluation methods for the embodied energy and carbon management of existing buildings in Egypt. *Buildings*, 9(4). <https://doi:10.3390/buildings9040090>

**Tarabieh, K.**, Nassar, K., Abu-Obied, N., & Malkawi, F. (2018). The statics of space syntax: Analysis for stationary observers. *Archnet-IJAR*, 12(1), 280-306. <https://doi:10.26687/archnet-ijar.v12i1.1282>

Wagdi, D., **Tarabieh, K.**, & Zeid, M. N. A. (2018). Indoor air quality index for preoccupancy assessment. *Air Quality, Atmosphere and Health*, 11(4), 445-458. <https://doi:10.1007/s11869-018-0551-y>

Hosny, O., Dorra, E., **Tarabieh, K.**, Nassar, K., Zahran, S., Amer, M., & Ibrahim, A. (2018). Development of an automated optimizer for sustainable urban landscape design. *Automation in Construction*, 94, 93-103. <https://doi:10.1016/j.autcon.2018.05.031>



Darwish, N., Mosaad, G., & **Tarabieh, K.** (2016). A proposed rating system for: Touristic communities in Egypt. *International Journal of Sustainable Development and Planning*, 11(3), 396-406. <<https://doi:10.2495/SDP-V11-N3-396-406>>

### Refereed Indexed Conference Proceedings

Abdelmohsen, S., **Tarabieh, K.**, El-Dabaa, R., Hassan, A., Salem, I., & El-Ghazi, Y. "Coupling Parametric Design and Robotic Assembly Simulation to Generate Thermally Responsive Brick Walls", Rome, Italy. In *Proceedings of the 16th IBPSA International Conference (BS 2019)*. <http://buildingsimulation2019.org/>

**Tarabieh, K.**, & N. El Beghermy, "Measuring the Effectiveness of Simulation-Based Education (SBE) in the Performance-Based Design Studio," Rome, Italy. In *Proceedings of the 16th IBPSA International Conference (BS 2019)*. <http://buildingsimulation2019.org/>

Wagdi, D., **Tarabieh, K.**, & P. Grant. "Optimizing Indoor Environmental Quality in Hot Arid Climates". In *Proceedings of the 10th International Conference on Indoor Air Quality, Ventilation and Energy Conservation, IAQVC 2019*. Bari, Italy, September 5-7, 2019.

Albadry, S., **Tarabieh, K.**, & Sewilam, H. (2017). "Achieving Net Zero-Energy Buildings through Retrofitting Existing Residential Buildings Using PV Panels". *Energy Procedia*, 115, 195-204.

**Tarabieh, K.** & Aboul-Magd, A. (2017). A Comparative Analysis for Three Residential Wall Insulation Systems in Hot-arid Climate Using Simulation tools and Experimental Testing. *Architectural Engineering Institute (AEI) 2017, ACSA Conference, Oklahoma, USA.*

**Tarabieh, K.**, Elnabarawy, I., Mashaly, I., and Rashed, Y. (2015) *The Power of Data Visualization: A Prototype Energy Performance Map for a University Campus*. *Sustainable Human-Building Ecosystems*: pp. 194-203. ISBN (PDF): 978-0-7844-7968-1. Publisher: American Society of Civil Engineers.  
<http://ascelibrary.org/doi/abs/10.1061/9780784479681.021>

**Tarabieh, K.**, and Malkawi, A. "Building an Urban Energy Performance Framework: Integrating Spatial Analysis and Building Simulation Tools for Campus Planning." In *Proceedings of the Tenth International Building Performance Simulation Association (IBPSA) Conference held in Beijing, China, 3-6 September 2007*, edited by I. Yi Jiang, Yingxin Zhu, Xudong Yang and Xianting Li, 1839 – 1845. Beijing, China: IBPSA, 2007.

### Refereed Non-Indexed Conference Proceedings

**Tarabieh, K.**, Abdelmohsen, S., El-Ghazi, Y., Bahaa, R., & Gamal, A. (2018), "Parametric Investigation of Brick Extrusion Patterns Using Thermal Simulation," In *Proceedings of the 4th IBPSA-England Conference on Building Simulation and Optimization (BSO-18)*. <<http://www.bso2018.event.cam.ac.uk>>

Elbeghermy, N., & **Tarabieh, K.**, (2018). "Assessing the value of environmental analysis tools in a performance driven design studio," (Heba Eihab Elsharkawy, Ed.), London, UK: *Second International Conference for Sustainable Design of the Built Environment: Research in Practice*. <http://newton-sdbe.uk/conferences/sdbe-2018/>

El-Tahan, R., Hosney, O. & **Tarabieh, K.** "Greening Existing Educational Buildings in Egypt: A Decision Support Model for Optimizing Retrofit Strategies". In *Proceedings of Building Tomorrow's Society - Canadian Society for Civil Engineering (CSCE)*. 2018.

- Albadry, S., Sweillam, H., & **Tarabieh, K.** (2017), "Enhancing Building Envelope of Existing Residential Buildings and Using PV Panels to Reach nZEB," *International Conference for Sustainable Design of the Built Environment (SDBE) in London on 20 and 21 December 2017*, (Dr. Heba Elsharkawy, Dr. Sahar Zahiri, Mr. Jack Clough, Eds.), London, England: International Conference for Sustainable Design of the Built Environment SDBE 2017. [http://newton-sdbe.uk/wp-content/uploads/2017/12/SDBE2017\\_-Proceedings-v1.pdf](http://newton-sdbe.uk/wp-content/uploads/2017/12/SDBE2017_-Proceedings-v1.pdf)
- Tarabieh, K.**, Mashaly, I., & Rashed, Y. (2017). "A Comparative Study for the Selection of a Curtain Wall Glazing type Suitable in a Regional Hot Arid Climate Condition". In Proceedings of the 32<sup>nd</sup> International PLEA Conference DESIGN TO THRIVE, Edinburgh 3-5 July, 2017.
- Tarabieh, K.**, Abdelmohsen, S., El-Ghazi, Y., El-Dabaa, R., Hassan, A., & Amer, M. (2017), "Parametric Investigation of Three Types of Brick Bonds for Thermal Performance in a Hot Arid Climate". In Proceedings of the 32<sup>nd</sup> International PLEA Conference DESIGN TO THRIVE, Edinburgh 3-5 July, 2017.
- Hosny, O., **Tarabieh, K.**, Dorra, E., & Nassar, K. (2017), "Social Impact of a Pilot Sustainable and Environmental Friendly Optimizer for Urban Landscaping (SEOUL)," Madeira, Portugal: The 3rd Energy for Sustainability International Conference - EfS 2017: Designing Cities and Communities for the Future. <http://www.efs2017.uc.pt/>
- Reda, N., Mossad, G., & **Tarabieh, K.** "A proposed Rating System for Touristic Communities in Egypt". In Proceedings of the Seventh International Conference on Sustainable Tourism by the Wessex Institute to be held in Valencia, Spain, May 8th-10th, 2016.
- Adassey, A., Mossad, G., & **Tarabieh, K.** "Towards Optimum Performance measures for Existing Hotel Buildings in Egypt: case study-The City of Sharm El Sheikh". In Proceedings of the Seventh International Conference on Sustainable Tourism by the Wessex Institute to be held in Valencia, Spain, May 8th-10th, 2016.
- Wagdy, D., AbouZeid, M. & **Tarabieh, K.** (2015). "Materials Selection for Improved Indoor Air Quality in Residential Buildings: A Pre-Occupancy Assessment". In Proceedings of the 31<sup>th</sup> International PLEA Conference ARCHITECTURE IN (R)EVOLUTION, Bologna 9-11 September 2015.
- Tarabieh, K.**, Aly, M., & Kazamel, M. "Teaching Energy Simulation in the Architectural Design Studio: An Experimental Approach." Paper presented at the International Building Performance Simulation Association, Cairo 2013 - Towards Sustainable & Green Built Environment, June 23<sup>rd</sup> - 24<sup>th</sup>, 2013 - Cairo, Egypt.
- Aly M., **Tarabieh, K.**, Bauriedel, C., & Kazamel, M. "Towards the Development of Energy Efficient Compact House: The Solar Decathlon SLIDE-S Prototype – Wall System design." Paper presented at the International Building Performance Simulation Association, Cairo 2013 - Towards Sustainable & Green Built Environment, June 23<sup>rd</sup> - 24<sup>th</sup>, 2013 - Cairo, Egypt.
- Tarabieh, K.**, & Khorshed, M. "Development of a Performance Based Evaluation Method for Carbon Management of Existing Building in Egypt." In proceedings of the International Conference on Sustainable Buildings (SB13) held in Graz, Austria 2013, September 25-28, 2013.
- Dabbour D., & **Tarabieh, K.** "Traffic Congestion Sustainable Solutions: Mass Transportation (Railway Upgrade)." In Proceedings of the first Global Climate Change, Bio Diversity and Sustainability (GCCBS) held at the Arab Academy for Science, Technology and Maritime Transport, April 13<sup>th</sup> -15<sup>th</sup>, 2013.

Mokhtar, M., Gabr, M., & **Tarabieh, K.** "Impact of Urban Landscape on City Environment – A GIS Based Study on Urban Plants" In proceedings of the 40th, Annual Conference Association of Egyptian American Scholars, held at AASTMT in Alexandria Egypt, Dec 28 – Dec 30, 2013.

El-Naggar, H., Mossad, G., & **Tarabieh, K.** "Barrier free environment; a case study to evaluate Misr railway station for accessibility". In Proceedings of the International Conference on Architecture and Built Environment (ICABE) - "Redefining the Concept of Islamic Architecture and Built Environment." Kulliyah of Architecture and Environmental Design, International Islamic University Malaysia, 13th – 14th November, 2013.

**Tarabieh, K.**, & Malkawi, A. "Development of Energy Performance Indicators for a Compact Urban Form using Environmental Analysis Tools." In Proceedings of the first International Conference on Sustainability and the Future held in Cairo, Egypt, 23rd-25th November 2010.

**Tarabieh, K.**, Malkawi, A. & Kyu Yi, Y. "A comparative study to Benchmark Energy Performance using Building Simulation Tools." In Proceedings of the Third Arab Society for Computer Aided Architecture Design (ASCAAD) Conference held in Bibliotheca Alexandrina, Alexandria, Egypt, 28-30 November 2007, edited by Ahmad Okeil, Aghlab Al-Attili & Zaki Mallasi, SECTION IV: Simulation and Virtual Prototyping, 183 - 198. Alexandria, Egypt: ASCAAD, 2007.

#### **Non- Indexed Articles**

**Tarabieh, K.**, M. Aly, & M. Kazamel (2018), "Teaching Energy Simulation in the Architectural Design Studio: An Experimental Approach," (Prof. Yahia Mohasseb, Ed.), Cairo, Egypt: Engineering Science and Military Technologies, 2, 59-64. <http://ejmtc.journals.ekb.eg/>

Etman, M., **Tarabieh, K.**, Bauriedel, C., & Kazamel, M. (2018), "Towards the Development of Energy Efficient Compact House: The Solar Decathlon SLIDE-S Prototype – Wall System design," (Prof. Yahia Mohasseb, Ed.) Engineering Science and Military Technologies, 2, 24-30. <http://ejmtc.journals.ekb.eg/>

### **3.2 PRESENTATIONS GIVEN**

**Tarabieh, K.**, National Organization of Urban Harmony, "The Impact of Carbon Emissions on Heritage Areas," Citadel, Cairo. (September 19, 2019).

**Tarabieh, K.**, & Abdelmohsen, S., Zak World of Façades, "Performative and Generative façade Investigations," Zak Inc, Cairo. (April 16, 2019).

**Tarabieh, K.** Mega-Cities: Intersections and Diversions an Asian- African Dialogue, "The American University in Cairo Building Resilience and Emissions Reduction: The Case of AUC," International Union of Architects (UIA), AUC. (February 3, 2019).

**Tarabieh, K.** Gouna workshop Winter 2018, "Evaluation of Hardscape and Building Facade Materials for a University Campus in a desert Environment," Freie Universität Berlin, Berlin Germany. (December 21, 2018).

**Tarabieh, K.** Third International Conference on Solar Energy Solutions for Electricity and Water Supply in Rural Areas, "Selection of Optimum Brick Geometry and Extrusion patterns for a Residential Building in a Desert Climate," RISE, AUC. (November 8, 2018).

**Tarabieh, K.** The American Society of Civil Engineers (ASCE), "Pioneering Green Architecture in Egypt: Case Study AUC," The American Society of Civil Engineers (ASCE), Alexandria. (September 8, 2018).

- Tarabieh, K.**, & Knille, N. Association of Physical Plant Administrators, APPA 2018 Annual Conference, "The Campus as An Architectural Lab, The Case of the American University in Cairo." (August 3, 2018).
- Tarabieh, K.** The Society of Building Science Educators 2018 Retreat, "Connecting research to the Architectural Design Studio: Case Study at the American University in Cairo," The Society of Building Science Educators, IOWA, USA. (July 18, 2018).
- Tarabieh, K.** The International Conference on Innovative Applied Energy (IAPE'19), "What else can a brick offer? Optimization of the traditional building envelope," University of Oxford, UK. (April 28, 2018).
- Tarabieh, K.** Sustainability and Value Engineering, "Introduction to LEED - Leadership for Energy and Environmental Design," VECG, Cairo, Egypt. (April 14, 2018).
- Tarabieh, K.**, & Nassar, K. Research Meeting with EURAC ITALY, "Research Portfolio of the Building Sciences Lab," American University in Cairo, Bolzano Italy. (April 8, 2018).
- Tarabieh, K.**, & Abdelmohsen, S. Advisory Board Meeting Spring 2018, "Overview of Research activities for the Building Sciences Lab," Architecture Department, American University in Cairo. (March 25, 2018).
- Tarabieh, K.**, National Conference of Scientific Research: Revealing Egyptian Potentials, "Evaluation and Development of Roof Insulation for Residential Applications," Masa Hotel, Nasr City. (March 19, 2018).
- Tarabieh, K.**, Sustainable Urban Development in Arid Cities via Establishment of Urban Climate Labs in Egypt, "Carbon footprint accounting for higher education in desert environments - case of the American University in Cairo.," TU-Berlin Campus, El Gouna. (December 19, 2017).
- Tarabieh, K.**, Sustainable Urban Development in Arid Cities via Establishment of Urban Climate Labs in Egypt, "Performance validation of selected exterior residential wall typologies in Egypt using a combined simulation and experimental testing method". TU-Berlin Campus, El Gouna. (December 18, 2017).
- Tarabieh, K.**, & Mansour, Y. Sustainable AUC Earth Week April 19 - 23, 2017, "Tracking AUC's Climate Impact: 5 Years of Data," The American University in Cairo, AUC. (April 23, 2017).
- Mostafa, M., **Tarabieh, K.**, Abdelhalim, K., Awatta, H. (Other), AUC 23rd Annual Research Conference 2017, "Institutional Citizenship and Sustainability in New Cities; the case of the American University in Cairo Neighborhood Initiative," AUC, AUC. (April 5, 2017).
- Tarabieh, K.**, NANO 592/5930 - Selected Topics in Nanotechnology, "Going Green: Climate Mitigation and the Built Environment," American University in Cairo, New Cairo. (April 3, 2017).
- Tarabieh, K.**, Graduate School of Education Workshop, "A guided and intentional understanding at curriculum reform and design for a university undergraduate education" USAID project, AUC. (February 4, 2017).
- Tarabieh, K.**, PROJEX AFRICA - The Future building construction and trade fair, "A New Window on Sustainability - case study," Cairo - Egypt. (December 12, 2016).
- Tarabieh, K.**, "Sustainable Construction Briefing by MEED', Lafarge Egypt - MEED, Dusit Thani. (December 7, 2016).

- Tarabieh, K.**, "Learn insights from expert case studies: opportunities & challenges for Egypt's construction industry" - Sustainable Construction Briefing, hosted by Lafarge Egypt (December 6, 2016).
- Tarabieh, K.**, "Egypt and the Region: Addressing Challenges in Global Health" The American University in Cairo, Watson House. (December 5, 2016).
- Tarabieh, K.**, Tutwiler, R., Jaskolski, T., Mansour, Y., & Rauch, M. CAAIRO 2016, "Transferring concern with climate mitigation to Institutional Sustainability: A case study applying carbon accounting as a tool for resource management in a desert environment," American Institute of Architects - ME, Cairo, Egypt. (November 18, 2016).
- Andrasik, P., **Tarabieh, K.**, Spencer, S., & McCormick, C. 2016 AASHE - Beyond the Campus, "LEED Lab Live; Curricula in O+M Application," AASHE, Baltimore - USA. (October 11, 2016).
- Tarabieh, K.**, Mashaly, I., & Rashed, Y. CAIARO 2016, "A Comparative Study for the Selection of a Curtain Wall Glazing Suitable in Hot Arid Climate Condition," American Institute of Architects - ME, Cairo, Egypt. (September 25, 2016).
- Tarabieh, K.**, Egyptian Engineering Day, "Pioneering Sustainability," IEEE - Young Professionals - Egypt Section, Egypt. (July 30, 2016).
- Tarabieh, K.**, Aboulmagd, A. The Architectural Engineering Institute 2017, "A Comparative Analysis for Three Residential Wall Systems in Hot-Arid Climate Using Simulation Tools and Experimental Testing," The American Society of Civil Engineers, USA. (May 31, 2016).
- Tarabieh, K.**, Elimam, A. EU-Egypt Research and Innovation Cooperation: Exploring New Frontiers in Renewable Energy Research and Innovation, "T2.3 Analysis of the needs and priorities - ERECI," EU - RDI, Marriot Hotel, Cairo. (May 22, 2016).
- Tarabieh, K.**, Middle East Green Building Summit, "Carbon Footprint Accounting for Higher Education," ProMedia, Sofitel Hotel - Cairo. (April 21, 2016).
- Tarabieh, K.**, MAGHRENOV, International Conference, "Adaptation of Prefabricated Housing Technology for the Production of Sustainable Housing Prototypes for the New Villages in the Desert," Euro-Med, La Villa Méditerranée - Marseille - France. (February 11, 2016).
- Tarabieh, K.**, ENGR 590 Graduate Seminar (Dr Maher Younan), "Carbon footprint accounting and Emission Reduction Research," School of Sciences and Engineering, The American University in Cairo. (November 18, 2015).
- Tarabieh, K.**, EGX Sustainability Conference, "Our Carbon Footprint at AUC," Egyptian Stock Exchange, Cairo. (October 25, 2015).
- Tarabieh, K.**, The second responsible management education research conference, School of Business, "Carbon Reduction and Offset as a Responsible Business Practice," The American University in Cairo, Cairo. (September 7, 2015).
- Tarabieh, K.**, The National Center for Research, "Our Carbon Footprint 3.0 at AUC," The National Center for Research, Environmental Sciences Committee, Cairo. (June 10, 2015).
- Tarabieh, K.**, Middle East Green Building Summit, "Carbon Footprint Accounting for Higher Education," ProMedia, Cairo. (April 22, 2015).

**Tarabieh, K.**, ECO Research Forum, "Our Carbon Footprint 3.0 at AUC," The International Building Performance Building Association (IBPSA) - Egypt Chapter, the American University in Cairo - New Cairo. (March 10, 2015).

**Tarabieh, K.**, The National Center for Research, "Our Carbon Footprint 2.0 at AUC," The National Center for Research, Environmental Sciences Committee, Cairo. (November 25, 2014).

**Tarabieh, K.**, MacDougall, B., & Rauch, M. SCUP 49 Planning for Transformation, "Going Green: Investing in Sustainability as a Strategic Imperative," The Society for College and University Planning, Pittsburg, USA. (July 14, 2014).

**Tarabieh, K.**, Lecture Series on Sustainable Energy Engineering, "Building Envelope Testing and Validation Workbench," The department of Energy Engineering, TU Berlin Campus El Gouna. (December 5, 2013).

**Tarabieh, K.**, ENGR 590 Lecture Series, "Evaluation of a Double Skin Façade," School of Sciences and Engineering, AUC. (November 21, 2013).

### 3.3 IN THE MEDIA

#### Internet mentions

"*Designing for the Desert: Egyptian and American Students Meet Online to Learn Smart Building Technologies*" Impact Story by the **IIE – Stevens Initiative**. (September 12<sup>th</sup>, 2019). Source: < <https://www.stevensinitiative.org/impact/designing-for-the-desert-egyptian-and-american-students-meet-online-to-learn-smart-building-technologies/> >

"*Lafarge at AUC: Constructing Change toward Sustainable Solutions*". **AUC News**. (April 16, 2019). Source: < <https://www.aucegypt.edu/news/lafarge-auc-constructing-change-toward-sustainable-solutions> >

"*6th LafargeHolcim Forum kicks-off with internationally renowned speakers and in-depth workshops*". **Lafarge Holcim Foundation Media News**. (April 4, 2019). Source: < <https://www.lafargeholcim-foundation.org/media/news/forum/day-1-symposium-examines-strategies-to-re-materialize-constructi> >

"Khaled Tarabieh is an Awards Ambassador supporting the LafargeHolcim Awards for Sustainable Construction" **Lafarge Holcim Foundation Web page**. (March 22, 2019). Source: < <https://www.lafargeholcim-foundation.org/experts/khaled-tarabieh> >

"*An honor and recognition for Egypt- 6th International LafargeHolcim Forum*". **Lafarge Holcim Foundation Media News**. (February 19, 2019). Source: < <https://www.lafargeholcim-foundation.org/media/news/forum/an-honor-and-recognition-for-egypt> >

"*AUC Celebrates 10 Years in New Cairo Campus*" **AUC News**. (November 13, 2018). Source: < <https://www.aucegypt.edu/media/media-releases/auc-celebrates-10-years-new-cairo-campus> >

"*The Buzz about HIVE*" by Tess Santorelli, **AUC News**. (October 16<sup>th</sup>, 2018). Source: < <https://www.aucegypt.edu/news/buzz-about-hive> >

"*AUC, DOW Partner to Address Egypt's Energy Needs*" by Nahla El Gendy. **AUC News**. (October 15<sup>th</sup>, 2018). Source: < <https://www.aucegypt.edu/index.php/news/auc-dow-partner-address-egypt%E2%80%99s-energy-needs> >

- “AUC, New Cairo City Authority Discuss Potential Cooperation” By: Dalia Al Nimr. AUC News. (July 29th, 2018). Source: <<https://www.aucegypt.edu/news/auc-new-cairo-city-authority-discuss-potential-cooperation>>
- “AUC's New Carbon Footprint Report Provides Model for Region” By: Katherine Pollock. AUC News. (July 26, 2017). Source: <<https://www.aucegypt.edu/news/stories/aucs-new-carbon-footprint-report-provides-model-region>>
- “Featured in the "Because of You" AUC Video clip to thank the University donors. **Online Video.** (July 1, 2017). Source: <[https://www.youtube.com/watch?v=usQ\\_Cn8GFss](https://www.youtube.com/watch?v=usQ_Cn8GFss)>
- “Building Sustainable Dreams - Architecture students draw on Cairo and the New Cairo campus as learning field sites to address community needs”. By Katherine Pollock | This story appeared in the July 2017 edition of AUC Today. This is the cover story for the July 2017 edition of **AUC Today**. Source: <<https://auctoday.com/2018/01/09/building-sustainable-dreams/>>
- “March for Science: AUC Reveals Carbon footprint Report”. By Serage Amatory. **The Caravan.** (April 30<sup>th</sup>, 2017), Source: <<https://www.aucaravan.com/?p=5426>>
- “Meet the Neighbors - A university initiative attempts to engage AUC with its surrounding community.” By Nadine Shaker. **The Cairo Review for Global Affairs.** (Summer 2017), Source: <<https://www.thecairoreview.com/midan/meet-the-neighbors/>>
- “AUC's New Carbon Footprint Report Provides Model for Region” **AUC News.** (April 26, 2017).
- “AUC celebrates Earth Week”. **AL Bawaba.** (April 24, 2017).
- “Neighborhood Initiative Fosters AUC Connections with Community” **AUC News.** (March 5, 2017). Source: <https://www.aucegypt.edu/news/stories/neighborhood-initiative-fosters-auc-connections-community>
- “AUC First in Region to Host LafargeHolcim Sustainable Architecture Competition” **AUC News.** (February 27, 2017).
- “Peace through Eco cities” **Online Article** by Richard Register. (June 30, 2016). Source: <<https://ecocitybuilders.org/peace-through-ecocities/>>
- AUC Professor Khaled Tarabieh Discusses AUC's Sustainability Projects at “Faculty at the Forefront” Series. **Al Shorouk.** (May 19, 2016)
- “Building a Green Future”. **AUC Office of Communications.** (February 9, 2016), Source: <<https://www.youtube.com/watch?v=rwLxREffTck>>
- “AUC is Pioneering Green Architecture in Egypt”. **AUC News.** (October 22, 2015), Source: <<https://www.aucegypt.edu/news/khaled-tarabieh-auc-pioneering-green-architecture-egypt>>
- “Finding Hope in the Desert” – A Rebuttal response to “Chasing Mirages in the Desert” by Khaled Fahmy. **Cairo Observer.** (March 14, 2015), Source: <<https://caiobserver.com/post/113598315254/finding-hope-in-the-desert#notes>>
- Special Edition “Egypt's New Capital City” **Les Carnets du CEDEJ.** (March 3, 2015), <source: <https://egrev.hypotheses.org/1210>>

"The lights are on but nobody's home...Harnwell tries to increase campus awareness of energy consumption" By: Rachel Baye. **The Daily Pennsylvanian**. (January 17<sup>th</sup>, 2008), Source: <https://www.thedp.com/article/2008/01/the-lights-are-on-but-nobodys-home>

### 3.4 CONTRACTS, GRANTS AND SPONSORED RESEARCH

#### External Grants

**Tarabieh, K. (PI)** "*Lafarge Holcim Re-Materializing Architecture*" Sponsored by Lafarge Holcim Foundation, **\$55,000** (April 1, 2019 - December 31, 2019) – Awarded Grant.

Hosny, O. (PI), **Tarabieh, K. (Co-PI)**, "*Development of an Integrated Sustainable Urban Landscaping and Farming Optimizer*" Sponsored by The Barlett Fund, **\$25,500**. Announced May 2019, Pending the award process.

**Tarabieh, K. (PI)**, "*Sustainability 101: Course development*," Sponsored by AUC, American University in Cairo. **\$7,000** (April 1, 2015 - Present). Awarded.

**Tarabieh, K. (PI)**, "*Development of an Experimental Test Facility for Insulation Testing*," Sponsored by DOW Chemical, Private, **\$130,797** (July 1, 2019 - June 30, 2020). Submitted and Pending Award.

**Tarabieh, K. (PI)**, "*Harnessing Innovation through Virtual Exchange (HIVE)*," Sponsored by IIE, Private, **\$1,432.90**. (January 1, 2018 - December 31, 2019).

**Tarabieh, K. (PI)**, "*Harnessing Innovation through Virtual Exchange (HIVE)*," Sponsored by IIE, Private, **\$8,859** (January 1, 2018 - December 31, 2019).

**Tarabieh, K. (AUC - PI)**, Elimam, A., Sherif, A., Abdel-Rahman, E., "*Egyptian Renewable Energy Cluster Initiative (ERECl)*," Sponsored by European Union, **\$100,000**, CO-PI in a consortium led by Cairo University, Professor Adel Khalil (PI) for a total project funding of € 820,000. (June 30, 2016 – June 30, 2018) – Awarded Grant.

Mostafa, M. (PI), Abdelhalim, K. (Co-PI), **Tarabieh, K. (Co-PI)**, "The Neighborhood Initiative," Sponsored by American University in Beirut & Ford Foundation, **\$20,000** (July 2015 - December 2015). Awarded.

#### Conference Grant (Internal Funding)

**Tarabieh, K.** "*Building Simulation 2019*" Sponsored by International Building Performance Simulation Association (IBPSA), American University in Cairo, **\$1,440** (September 1, 2019 – September 5, 2019) – Pending approval.

**Tarabieh, K.** "*Building Simulation Optimization 2018*" Sponsored by International Building Performance Simulation Association (IBPSA - UK), American University in Cairo, **\$1,835.61** (September 10, 2018 – September 14, 2018). Awarded Grant.

**Tarabieh, K.**, The 7th Biennial Professional Conference for 2017. The theme of the conference is the "*Resilience of the Integrated Building: A Community Focus*", Sponsored by Architectural Engineering Institute (AEI) - ACSE, American University in Cairo, **\$2,648.88** (April 11, 2017 - April 13, 2017). Awarded Grant.



**Tarabieh, K.**, "*The First International Symposium on Sustainable Human-Building Ecosystems (ISSHBE)*" Sponsored by Carnegie Mellon University, American University in Cairo, **\$1,970** (October 5, 2015 - October 7, 2015). Awarded Grant.

**Tarabieh, K.**, "*SB13 Graz Austria*" Sponsored by The American University in Cairo, American University in Cairo, **\$1,818**. (September 30, 2013). Awarded Grant.

#### **Coordination of a Conference/Workshop Grant**

Mostafa, M. (PI), Abdelhalim, K. (Co-PI), **Tarabieh, K. (Co-PI)**, Awni, A., Shalakany, A., Rauch, M., "*Universities and their Neighborhoods- and AUC-AUC Conversation*" Sponsored by American University in Beirut, Ford Foundation, **\$80,000** (July 2015 - December 2015). Awarded Grant.

Mostafa, M. (PI), **Tarabieh, K.** (Supporting), "*Cairo Green- Sustainable Interventions in Urban Cairo*," Sponsored by Swiss Embassy, Cairo & AUC, American University in Cairo, **\$4,500** (November 2012 - May 2013). Awarded Grant.

#### **Research Development Grant**

**Tarabieh, K. (Co-PI)**, Ismail, Y. (Co-PI), El-Gendy, A. (PI), "*Internet of Things (IoT) Prototype for Smart Building System: Optimization of Energy Efficiency and Indoor Environmental Quality*" Sponsored by American University in Cairo - Dean SEED Grant **\$5,000**, American University in Cairo. (February 1, 2017 – June 30, 2019). Awarded Grant.

**Tarabieh, K. (PI)**, Elimam, A., Fahmy, E., Farag, M., "*Toward Thermally Efficient, Light, Cost Effective and Agile Building in Egypt*" Sponsored by CPC Holding Organization **\$3,500**, Bena and Amal Grant, (July 1, 2017 - June 30, 2019). Awarded Grant.

#### **Research Grants (Internal Funding)**

**Tarabieh, K. (Co-PI)**, Sherif, N. (PI), "What defines the Quality of an Architectural Student: An Assessment of Screening Mechanisms for Architectural Engineering Students at AUC" Sponsored by The American University in Cairo, American University in Cairo, **\$2,357** (January, 2013 – December, 2015). Awarded Grant.

ElGindi, T. (Co-PI), Johnson-Pynn, J. (PI), Tutwiler, R. N. (Co-PI), **Tarabieh, K. (Co-PI)**, Mansour, Y. (Supporting), "*American University in Cairo's Transition to a Culture of Sustainability*," American University in Cairo, **\$74,000**. (September 3, 2018 - June 30, 2021). Awarded Grant.

**Tarabieh, K. (PI)**, Nassar, K. (Co-PI), Kamel, B. (Co-PI), Hosny, O. (Co-PI), "Development of Energy Efficient and Smart Window Prototype," Sponsored by American University in Cairo, American University in Cairo, **\$49,656** (April 1, 2017 - December 31, 2019). Awarded Grant.

Mostafa, M. (PI), Abdelhalim, K. (Co-PI), **Tarabieh, K. (Co-PI)**, "The AUC Neighborhood Initiative- Preparatory Research," Sponsored by AUC, **\$18,050** (January 2016 - December 2016). Awarded.

**Tarabieh, K. (PI)**, "*Measurement of the Thermal Characteristics of External Envelope Materials for Typical Residential Buildings in Egypt using the Hot Box Guarded Method ASTM C1363*," Sponsored by American University in Cairo, American University in Cairo, **\$5,851** (March 10, 2013 - December 30, 2016). Awarded.

**Tarabieh, K. (PI)** "The Building Performance Dashboard & Tracking System Project," Sponsored by The American University in Cairo, American University in Cairo, **\$2,891** (January 31, 2014 - June 1, 2015). Awarded.

#### Submitted Proposals (Not Awarded)

**Tarabieh, K. (Co-PI)**, Nassar, K. (Co-PI), Meggers, F. (PI), "*Fenestration Design and Optimization Using Recycled Plastics*" Sponsored by Bartlett Foundation, Private, **\$48,000** (February 1, 2017 - September 30, 2017).

Abdelmohsen, S. (Co-PI), Hamhaber, J. (PI), Khalifa, M. (Co-PI), Refat, M. (Co-PI), El-Khattam, W. (Co-PI), Elmoustafa, A. (Co-PI), Elrefaie, M. (Co-PI), Ayad, H. (Co-PI), Madkour, H. (Co-PI), Kamel, B. (Co-PI), **Tarabieh, K. (Co-PI)**, "*Systematic PROcess for Curricular Development of Interdisciplinary Master Programs on Resource Efficient Cities - ProMaREC*," Sponsored by Erasmus+, Other, **\$500,000**. (2016).

Sherif, A. (PI), **Tarabieh, K. (Supporting)**, Sabry, H. (Supporting), Kamel, B. A. (Supporting), Abou Zeid, M. N. (Supporting), Fahmy, E. H. (Supporting), Nassar, K. (Supporting), Serag El-Din, M. A. (Supporting), Sewilam, H. (Supporting), Hosny, O. A. (Supporting), "*Construction of Two Sustainable Housing Prototypes for the Red Sea Southern Region: Low Cost, Low Technology, Low Energy and Low Carbon Content Buildings*," Sponsored by Academy for Scientific Research and Technology, State. (2015).

**Tarabieh, K. (PI)**, Abou Zeid, M. N. (Co-PI), Wagdi, D. M. (Supporting), "*Indoor Air Quality Assessment for a university campus in hot arid climates: Post occupancy evaluation*," Sponsored by British Embassy - FCO Strategic Programme Fund, Other, **\$14,820**. (June 1, 2015 - June 30, 2015).

Sherif, A. (PI), **Tarabieh, K. (Supporting)**, Sabry, H. (Supporting), Kamel, B. A. (Supporting), Abou Zeid, M. N. (Supporting), Fahmy, E. H. (Supporting), Nassar, K. (Supporting), Serag El-Din, M. A. (Supporting), Sewilam, H. (Supporting), Hosny, O. A. (Supporting), "*Construction of Two Sustainable Housing Prototypes in the New Aswan City*," Sponsored by Academy for Scientific Research and Technology, State. (2015).

Sherif, A. (PI), **Tarabieh, K. (Supporting)**, Serag El-Din, M. A. (Supporting), Kamel, B. (Supporting), Hosny, O. A. (Supporting), Nassar, K. (Supporting), Sewilam, H. (Supporting), Sabry, H. (Supporting), "*Sustainable Social Housing Prototype: Greening the Current Social Housing Prototype for Sustainability*," Sponsored by Academy for Scientific Research and Technology, State. (2015).

**Tarabieh, K. (PI)**, "*Assessment of the Carbon footprint and Energy Saving Strategies for Egyptian universities*," Sponsored by Academy of Scientific Research and Technology (ASRT), Federal. **\$50,000** (June 1, 2015 - December 1, 2015).

**Tarabieh, K. (PI)**, "*Climate Controlled Greenhouses for Improved Agricultural Productivity and Sustainable Agricultural Systems*," Sponsored by STDF – National Challenges Program, Local, **\$184,797.00**. (September 1, 2014 - October 1, 2014).

**Tarabieh, K. (Co-PI)**, Sherif, A. (Principal), "*Development of Smart Low-Cost Energy Efficient Solar Screens*," Sponsored by STDF – National Challenges Program, Local, **\$117,717**. (September 1, 2014 - September 30, 2014).

Sherif, A. (PI), **Tarabieh, K. (Co-PI)**, "*Evaluation and Improvement of the Thermal Properties of Egyptian and Italian Building Walls Using the Hot Box Experimental Method*," Sponsored by

The Executive Programme of Scientific and Technological Cooperation between Arab Republic of Egypt and Italian Republic, State, \$447,063.00. (2012).

### 3.5 INTELLECTUAL CONTRIBUTIONS IN SUBMISSION

#### Refereed Journal Articles

**Tarabieh, K. & M. Khorshid**, "Exploring New Strategies for Sustainable Cities and Communities in Egypt: A UN SDG-based Framework Approach," *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, (Matthew Hardy, Ed.).  
<https://www.tandfonline.com/toc/rjou20/current>

### 3.6 BOOK AND JOURNAL PAPER REVIEWS

**Tarabieh, K. (2014)**, A Review of *Fundamentals of Integrated Design for Sustainable Buildings* by by Marian Keeler and Bill Burke, Hoboken, New Jersey, USA: Wiley and Sons, *Fundamentals of Integrated Design for Sustainable Buildings*, 338.

## 4 SERVICE

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### 4.1 DEPARTMENT SERVICE

**Committee Member**, Program/Course Outcome development and alignment committee. (September 10, 2018 - Present).

**Committee Member**, Aptitude Assessment for Architecture. (September 1, 2016 - Present).

**Co-Leader**, Assembly and Installation of the Environmental Testing Chamber. (December 1, 2012 - Present).

**Co-Chair**, Strategic Planning and Academic Assessment Committee. (September 18, 2018 - June 18, 2019).

**Committee Chair**, Ad-hoc committee to assess the petition of a Thesis II student. (May 29, 2019 - June 10, 2019).

**Co-Chair**, Strategic Planning and Assessment Committee. (September 15, 2018 - October 30, 2018).

**Committee Member**, Committee on the improvement of undergraduate technical courses. (July 1, 2017 - December 31, 2017).

**Committee Member**, Health and Safety Committee. (February 1, 2016 - December 1, 2016).

**Event Organizer**, Graduate Studies in the US: Real Estate Development Talk. (March 16, 2016).

**Committee Member**, Screening of CVs and background information. (January 10, 2016 - January 28, 2016).

**Committee Member**, UIA Accreditation Visit Planning Team. (October 1, 2012 - October 1, 2014).

**Support for faculty**, Department Assessment. (January 15, 2013 - December 15, 2013).

**Committee Member**, Teacher Evaluation. (February 5, 2013 - March 5, 2013).

## 4.2 COLLEGE SERVICE

**Committee Member**, Department Research Committee (DRC) for the Sustainable Development Graduate Program. (September 20, 2018 - Present).

**Department Liaison**, Webpage Development. (June 1, 2016 - Present).

**Faculty Advisor**, Progreen Online Diploma. (January 1, 2014 - Present).

**Committee Member**, Interview of the Environmental Engineering Position. (February 26, 2017 - March 26, 2017).

**Committee Member**, Webpage and online content Committee. (February 1, 2016 - February 1, 2017).

**Committee Member**, Safety and Security Committee. (February 1, 2016 - December 1, 2016).

## 4.3 UNIVERSITY SERVICE

**Committee Member**, Carbon Footprint CFP Committee. (November 1, 2012 - Present).

**Committee Member**, Energy and Resource Conservation and Efficiency (ECRE). (November 1, 2012 - Present).

**Guest Speaker**, SEMR 2099 – Core Program. (December 8, 2019).

**Committee Member**, Strategic Planning Committee. (February 20, 2017 - December 20, 2018).

**Faculty Advisor**, Preparation for the Centennial Exhibits. (November 9, 2018 - November 21, 2018).

**Committee Chair**, Library and Learning Technologies Advisory Committee. (December 1, 2013 - September 30, 2018).

**Committee Member**, AUC Institutional Middle States Accreditation. (May 10, 2016 - June 30, 2018).

**Special Institutional Assignment**, AUC Delegation to the National Conference for Scientific Research. (March 24, 2018 - March 25, 2018).

**Co-Chair**, AUC Research Conference 2016. (January 15, 2016 - May 31, 2016).

**Committee Member**, AUC Task Force for Setting Strategic Priority Areas for Research Task. (January 16, 2014 - December 31, 2014).

#### 4.4 PEER REVIEW

**Reviewer**, Journal Article, The Arab Academy for Science and Technology and Maritime Studies, Alexandria. (December 1, 2015 - Present).

**Task Force Chair**, The Egyptian Green Building Council, Cairo. (January 1, 2015 - December 31, 2020).

**Reviewer**, Thirty-Two (32) Journal Paper Reviews in top tiered Journals: Buildings, Sustainability, Urban Science, International Journal of Environmental Research and Public Health (IJERP) and Energies. The review breakdown as follows:

- **Sustainability: 21**
- **Buildings: 7**
- **Urban Science: 1**
- **IJERP: 1**
- **Energies: 1**

**Reviewer**, Journal Article, ArchNet-IJAR Journal (El Sevier). (May 12, 2018 - June 15, 2018).

**Jury Member**, The Arab Academy for Science and Technology, Alexandria. (June 12, 2016).

**Reviewer**, Journal Article, Energy and Buildings Scientific Journal (El Sevier). (April 15, 2016 - May 13, 2016).

**Session Chair**, 22nd Annual AUC Research Conference, Cairo. (May 4, 2016 - May 5, 2016).

#### 4.5 PUBLIC SERVICE

**University Liaison**, The American Institute of Architects – Middle East. (2016 – present)

**Session Chair**, Bibliotheca Alexandrina - The Alexandria Library, Alexandria.

**Guest Speaker**, IEEE Young Professionals (YP) Egypt, Cairo. (September 6, 2016 - Present).

**Board Member**, The Constructed Environment Research Network Advisory Board (2016-2017)

**Technical Adviser**, Association for the Advancement of Sustainability in Higher Education. AASHE. (December 1, 2011 - September 1, 2015).

#### 4.6 STUDENT EXTRA-CURRICULAR ACTIVITIES

**Faculty Advisor**, AA Adviser 2018-2019. (September 2, 2018 - Present).

#### 4.7 ACCREDITATION EXHIBITS (INTERNATIONAL UNION OF ARCHITECTS EXTERNAL AND RE-VALIDATION VISITS)

- **Faculty Coordinator and Curator**, UIA Exhibit of Selected Student Works (March 16, 2014 - March 18, 2014)

- **Faculty Coordinator and Curator**, UIA Exhibit of Selected Student Works (May 26, 2016 - May 27, 2016)
- **Faculty Coordinator and Curator**, UIA Exhibit of Selected Student Works (June 28, 2017 - June 30, 2017)
- **Faculty Coordinator and Curator**, UIA Exhibit of Selected Student Works (October 23, 2017 - October 25, 2017)
- **Faculty Coordinator and Curator**, UIA Exhibit of Selected Student Works (December 1, 2018 - December 4, 2018)

## 4.8 PROFESSIONAL & CREATIVE WORKS

### Professional Experience in Egypt (2010 – Present):

#### Environmental Design and Planning Adviser August 2012 – Present

- LEED GA and AP Trainer (ESS – School of Sciences and Engineering, AUC). Conducted various sessions in Cairo, Dubai, Singapore, KSA, Kuwait and Doha.
- LEED Certification (EBOM) – Faculty House, AUC (Pending)
- Feasibility study for Office Building Certification – Vodaphone Egypt.
- LEED Certification Full services – AL Jazi Real Estate Residential Development.

#### Design Studio Director – AWAD and Partners November 2011 – August 2012

- Managed a staff of eight architects and site engineers for the design and construction of the two main Museum wings of the Greek Orthodox Patriarchate of Alexandria.
- Design Management for the Historic Preservation of St. George Church located in Old Cairo. The work included stabilization of the structure, internal renovations of the main church and exterior landscape restoration and adding accessible upgrades required to bring the building to code.
- Renovation of the Antoniadis Palace in Alexandria.

### Professional Experience in the U.S. (1996 – 2010)

#### Director of Project Management for Real Estate March 2008 – September 2010

University of Pennsylvania, Facilities and Real Estate Services (FRES) – Real Estate Department

- Served in a senior leadership position responsible for all project related documentation, financial records, and reporting for the off campus real estate development. Monitored construction project budgets and schedule.
- Served as liaison between clients, funding sources and contractors, architects, and consultants, interface with related University departments.
- Directed project meetings and acted as primary interface for all communication to all clients and project team members on project goals and objectives.

#### Project Manager March 1998 – February 2008

University of Pennsylvania, Facilities and Real Estate Services – Design and Construction Department

- Successfully managed and completed a total of 150MM capital construction projects inclusive of: customer/user relations, design consultants, bidding, contract negotiation, cost control, punch list and turnover for different schools on campus. Projects included office renovations, electrical upgrades, Network and Security system projects, ADA space upgrades and renovation for sports facilities on campus. Day to day tasks involved management of facilities renewal projects from the planning phase to construction phase until project close out and client occupancy for different schools on campus.
- Managed project completion, close out, and transition to operations as applicable (i.e. 3rd party management or FRES staff). Managed and supervise project staff, architects, engineers, contractors and consultants as required. Managed and completed a variety of projects that which totals 300MM of design and construction from initial planning to close-out.
- A list of selected projects as follows:
  - **McNeil Center for Early American Studies (MCEAS):** \$5.2MM – 12,090 GSF. Architect: Robert AM Stern Architects, New York, NY.
  - **The Penn Information Commons Project:** \$2MM – 8,000 GSF, Architect: Ann Beha Architects, Boston, MA.
  - **Graduate Research Wing Renovations:** \$2.8 MM – 12,000 GSF, Architect: Kris Kolo LLC, Philadelphia, PA.
  - **Jon M. Huntsman Hall – The Wharton Business School:** \$140MM - 320,000 GSF, Architect: Kohn Pedersen Fox (KPF), New York, NY.
  - **Generation Walk 125 years of Women at Penn:** \$1.8MM – 5,000 GSF, Landscape Architect: Margie Ruddick Landscape, Philadelphia, PA
  - **Consolidation of a 71,000 GSF wet/dry lab and research space consolidation,** School of Medicine \$5.25 MM, Architect: Kling Stubbins LLC, Philadelphia PA.
  - **Music Building:** Managed the planning and design for the new 25,000 GSF Music building renovation and addition for the School of Arts and Sciences, \$15MM budget, Architect: Ann Beha Architects, Boston MA.

**Space Planner**

October 1996 – March 1998

University of Pennsylvania, Facilities Services – Office of the University Architect

Organized and managed the whole collection of current information on University buildings –123 buildings with a total of 11 million Square Feet. Prepared special reports on space usage to assist the university administrators and all schools in space selection, decision-making and planning process.

**Architect**

April 1996 – October 1996

Shapiro Petruskas Gelber (SPG3) Architects, Philadelphia, PA.

Project Architect for a number of retail projects in NJ & Pennsylvania. Duties include design, coordination and project closeout.

**Appendix 1:**

Selected professional works in Egypt (Team Member, Architectural Design – Awad Associates)

- Dayar El Haram Residential Compound
- The Patriarchate Archaeological Museum
- The Renovation of Villa Antoniadis
- The Renovation of Saint George's Church, old Cairo

Selected professional works in the US (Team Member, Project Manager – University of Pennsylvania)

- Music Building Renovations – School of Arts and Sciences
- Jon M. Huntsman Hall – Wharton School
- McNeil Early American Studies – School of Arts and Sciences