

# BSCAiro2019 conference program



Simulation  
for Sustainable  
Built Environment

Registration opens	<b>Day 1: Thursday 28<sup>th</sup> of November 2019 at 4:00pm</b>		
<b>Opening speech</b>	Conference Honorable Chairman & Conference Chairman	Conference statistics	Thursday 28 <sup>th</sup> of November 4:30pm – 4:45pm
<b>KEYNOTE 1</b>	<b>PROF. DRURY CRAWLEY</b>	<b>MODELING INFRASTRUCTURE RESILIENCE FOR SUSTAINABLE URBAN DEVELOPMENT</b>	<b>THURSDAY 28<sup>TH</sup> OF NOVEMBER 4:50PM – 5:30AM</b>
<b>COFFEE BREAK</b>	<b>5:30PM – 6:00PM</b>		
<b><u>Workshop I</u></b>	Building Performance Inspection using Drones Assistant Prof. Tarek Rakha		<b>Thursday 28<sup>th</sup> of November 6:00pm – 9:00pm</b>

Registration opens

**Day 2: Friday 29<sup>th</sup> of November 2019 at 9:30am**

		<b>Presenter</b>	<b>Paper title</b>	<b>Session details</b>
<b>Chair:</b> Assst. Prof. Mohamed Mahdy & Assst. Prof. Khaled Tarabieh	<b>BIM-ID 23</b>	Fayrouz Ashraf	HBIM as a Tool for Branding Historical Egyptian Sites by Utilizing Augmented Reality through the building simulation of Al-Baron Palace.	<b>Session (I): BIM &amp; HB</b> <b>Friday 29<sup>th</sup> of NOV.</b> <b>10:00am – 11:20am</b>
	<b>BIM-ID 24</b>	Mohamed Elnabawi	Investigating Building Information Model (BIM) to Building Energy Simulation (BES): Interoperability and Simulation Results.	
	<b>BIM-ID 26</b>	Mohamed Elsaid	Scan-to-Building Information Modelling vs. HBIM in Parametric Heritage Building Documentation.	
	<b>HB-ID 31</b>	Amr Abdallah	The influence of different courtyard ratios in university buildings on their thermal performance during the hot period: Faculties of Agriculture and Education, New Sohag University, Egypt as a case study.	
<b>KEYNOTE 2</b>		<b>PROFFESOR MOEMEN AFIFI</b>	<b>THE FAILURE OF SUSTAINABLE ARCHITECTURE: PAST, PRESENT &amp; FUTURE</b>	<b>FRIDAY 29<sup>TH</sup> OF NOV. 1:30PM – 2:00PM</b>
<b>Chair:</b> Prof. Morad Abdelkader & Assst. Prof. Ali El-Haridi	<b>RS-ID 16</b>	Dina Elmeligy	The Bio-adaptive algae contribution for sustainable architecture.	<b>Session (II): CFD &amp; RS</b> <b>Friday 29<sup>th</sup> of NOV.</b> <b>2:00pm – 3:20pm</b>
	<b>RS-ID 21</b>	Abdelaziz Mohamed	Economic Evaluation of Renewable Energy Systems, Case Study; an Eco-House Powered by Nano-Crystal PV in New Aswan, Egypt.	
	<b>RS-ID 30</b>	Marianne Nabil	Investigation on utilizing garbage as a resource for a sustainable neighborhood; Case study of a neighborhood in New Cairo, Egypt.	
	<b>RS-ID 32</b>	Madonna Makram	Piezoelectric Tiles as a Sustainable Approach for Designing Interior Spaces and Creating Self-Sustain Projects.	
	<b>CFD-ID 34</b>	Mustafa M. Elwan	Lattice windows as a natural ventilation strategy in hot, humid regions.	

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**Day 2: Friday 29<sup>th</sup> of November 2019 at 9:30am**

**Presenter**

**Paper title**

**Session details**

**LUNCH BREAK**

**3:20PM – 4:10PM**

**Chair:**  
Prof. Ahmed Sherif &  
Assoc. Prof. Hatem Mahmoud

**EDE-ID 11**

Sara Alsaadani

Teaching BPS to architects: A closer look at the building performance simulation 'consumer' and 'performer' training paradigms.

**EDE-ID 28**

Haitham Samir

The Utilization of Environmental Simulation Tools in Architectural Design Education.

**DA-ID 35**

Muhammad Aminu

Assessing the Effects of Floor Levels on Daylight Distribution in Mid-rise Office Buildings in Composite Climate of Nigeria

**DA-ID 38**

Shady Shawky

A Design Chart to Determine the Well Efficiency and the Maximum Spacing of Skylights for Daylighting as a Function of the Skylight Well Width.

**Session (III): EDE & DA  
Friday 29<sup>th</sup> of NOV.  
4:10pm – 5:20pm**

**COFFEE BREAK**

**5:20PM – 5:40PM**

**Workshop II**

**How To Choose The Best Weather Data Set for Building Performance Simulation?**

Prof. Drury Crawley

**Friday 29<sup>th</sup> of NOV.  
5:45pm – 7:30pm**

Registration opens		Day 3: Saturday 30 <sup>th</sup> of November 2019 at 9:30am		
		Presenter	Paper title	Session details
KEYNOTE 3		ASSIST. PROFESSOR TAREK RAKHA	DESIGN COMPUTING AND AERIAL INTELLIGENCE: HIGH PERFORMANCE BUILDING FUTURES	SATURDAY 30 <sup>TH</sup> OF NOV. 10:00AM – 10:40AM
Chair: Prof. Ahmed Abdin & Assist. Prof. Sherif Ezzeldin	EE-ID 10	Arda Karasu	Simulation-based energy efficiency retrofit of listed building ensembles: An alternative solution with a climate envelope.	<b>Session (IV): EE</b> <b>Saturday 30<sup>th</sup> of</b> <b>NOV.</b> <b>10:50am –</b> <b>12:10pm</b>
	EE-ID 12	Omar Elrawy	The impact of climate change on Building Energy Simulation (BES) uncertainty - Case study from a LEED building in Egypt.	
	EE-ID 14	Micheal William	Assessing the Energy Efficiency and Environmental impact of an Egyptian Hospital Building.	
	EE-ID 27	Ann M Biju	Simulation-Based Optimization of Building Orientation for Optimum Electricity Consumption of Indian Residential Buildings.	
	EE-ID 33	Somaya Albadry	Financial Aspect and Practicability of Converting Existing Buildings to nZEB Case Study in Cairo, Egypt	
COFFEE BREAK		<b>12:10PM – 12:50PM</b>		
Chair: Prof. Abbas Zafarny & Assist. Prof. Heba Hassan	IEQ-ID 6	Ayah Elkhiary	Simulation Analysis for evaluating Smart technique of Energy Performance in Egypt.	<b>Session (V): IEQ</b> <b>Saturday 30<sup>th</sup> of</b> <b>NOV. 12:50pm –</b> <b>2:10pm</b>
	IEQ-ID 25	Omar Elrawy	Contrasting daylight simulation, measurements, and occupant's perception in a LEED Office building in Arid Climate.	
	IEQ-ID 37	Mahmoud Yasser	Towards a Sustainable Touristic Buildings in Egypt Using Innovative Wall Materials	
	IEQ-ID 41	Shaimaa Fayed	Inspiration for the Morphology of the Building Second Skin to Enhance Air Flow in Building	

Registration opens

**Day 3: Saturday 30<sup>th</sup> of November 2019 at 9:30am**

**Presenter**

**Paper title**

**Session details**

**LUNCH BREAK**

**2:10PM – 3:00PM**

Chair:  
Prof. Ayman Hassan &  
Assist. Prof. Samar  
Allam

**OPT-ID 4**

Marwa El  
Gendy

Interactive Eco-Cell Parametric Shading  
Structure Simulation (Hexagonal Shell of Light)  
by using Parametric Environmental Tool.

**OPT-ID 19**

Fezzai  
Soufiane

Quantifying the effectiveness of mass  
proportions and the orientation for buildings  
on thermal performance in Tebessa, Algeria.

**OPT-ID 20**

Amr Allam

Metaheuristic Optimization of Daylighting and  
Energy Performance in Office Spaces.

**OPT-ID 22**

Hazem Talaat

A framework for generating thermal  
performance envelope.

**Session (VI): OPT  
Saturday 30<sup>th</sup> of NOV.  
3:00pm – 4:20pm**

**Closing  
session**

**CONFERENCE BOARD**

1- PANEL DISCUSSION AND  
SUGGESTIONS.  
2- FIRST AND SECOND BEST PAPERS  
AWARDS.

**Saturday 30<sup>th</sup> of NOV.  
4:30pm – 5:30pm**

**COFFEE BREAK**

**5:30PM – 6:00PM**

**Workshop III**

**ENVI-met V4.0 & Parametric  
Techniques**

**Urban Simulations in Present & Future**

Assoc. Prof. Mohammad Fahmy, Eng. Ahmed Ayad and Eng.  
Ibrahim Elwy

**Saturday 30<sup>th</sup> of NOV.  
6:00pm – 9:00pm**