



Housing & Building National Research Center International Conference  
 Future Vision & Challenges for Urban Development  
**Green Smart Sustainable Building between Present & Future**  
**(GSSB 2024)**



14 -17 December 2024, Fairmont Nile City, Cairo, Egypt

Monday 16/12/2024		Magenta Hall	Lavender Hall
8:00 AM	<b>Pick-up Passengers by bus from HBRC, Dokki to Fairmont Hotel and Registration</b>		
9:00 AM	<b>Registration Through Conference Day</b>		
9:00 am – 9:30 am	<b>Session Chair :</b>	<b>Prof. Amr Aly Abd El-Rahman; ; Prof.Osama Hodhood; Prof. Dina Sadek</b>	<b>Prof. Ahmed El-Gabry; Eng. Mohamed El-Refay</b>
		<b>Keynote Lecture - 8</b>	<b>Keynote Lecture - 9</b>
		<b>Optimization Ultra-High performance concrete properties through advanced Rheological design and Nano-technology</b>	<b>Green Building Solution</b>
		Prof. Kamal H. Khayat, Vice Chancellor for Research and Innovation at Missouri University of Science and Technology.	Eng. Mohamed Hisham Sitteen, Specification & SSS Manager at Jotun Egypt
9:30 am – 10:00 am	<b>Session Chair :</b>	<b>Prof. Ahmed El-Gabry; Prof. Sherif Khafaga</b>	<b>Prof. Ashraf Kamal; Assoc.Prof. Hoda Shaker</b>
		<b>Keynote Lecture - 10</b>	<b>Paper Session 3: Energy in Construction and Building Materials</b>
		<b>Future Directions in Road Safety Research</b>	<b>Paper (4):</b> Dr. Yuxiang Chen, Design of Dry-Stacked Thermally Insulated Composite blocks for exterior walls
		Prof. Karim El-Basyouny, Professor & Associate Dean at the University of Alberta, Canada.	<b>Paper (8):</b> Dr. Ahmed Hammad, Enhancing Building Energy Management For Climate Resilience And Sustainability: Integrating MATLAB, IOT, And KBDSS
			<b>Paper (7):</b> Dr. Bakr M Aly Ahmed, SUCCESS OF NEW GREEN & SMART CITIES: THE LINE, NEOM-ECONOMIC, ENVIRONMENTAL, and SOCIAL IMPACTS
			<b>Paper (13):</b> Dr. Yuxiang Chen, Adjustments of Existing Analytical Methods for Estimating the Effective Thermal Resistance of Masonry Veneer Walls
10:00 am - 10:45 am	<b>Session Chair :</b>	<b>Dr. C. “Lobo” Cruz-Noguez</b>	<b>Prof. Ahmed El-Gabry; Prof. Sayed Hussien</b>
		<b>Key-Note Panel Discussion - 6</b>	<b>Workshop - 1</b>
		<b>Role of Technology in Civil Engineering</b>	<b>Use of Plastic Waste in Road Construction</b>
		Prof. Karim El-Basyouny, Professor & Associate Dean at The University of Alberta, Canada.	Prof. Esraa Emam Ali, Professor at Building Materials Research and Quality Control Institute, HBRC
		Prof. Samer Adeeb, Professor and Chair. Civil and Environmental Engineering, School of Mining and Petroleum Engineering, University of Alberta, Canada.	Dr. Elsayed Fahmy, Building Materials Research and Quality Control Institute, HBRC
		Prof. Farnaz Sadeghpou, Schulich School of Engineering, Department of Civil Engineering, university of Calgary; VP Technical, Canadian Society for Civil Engineering	
10:45 am- 11:30 am	<b>Session Chair :</b>	<b>Prof. Reham Mohamed Hafez</b>	<b>Assoc. Prof. Dina Salem; Dr. Sara Ibrahim; Dr. Yuxiang Chen</b>
		<b>Key-Note Panel Discussion - 7</b>	<b>Key-Note Panel Discussion - 8</b>
		<b>Women Leadership in Urban Development: lessons from Practical Experience</b>	<b>Energy and Sustainability</b>
		Mrs. May Abd El-Hamid, CEO of Social Housing & Mortgage Finance Fund Egypt (SHMFF), The Vice President of the African Union for Real Estate Finance.	Dr. C. “Lobo” Cruz-Noguez, University of Alberta, Edmonton, Alberta, Canada.
		Prof. Ghada Farok, Vice President of Ain Shams University for Community Service and Environmental Development Affairs	Dr. Ahmed Hammad, University of Alberta, Canada.
		Dr. Maha Fahim, Chairman of the General organization for physical Planning	Dr. Maysoun Ismaiel, University of Alberta, Canada.
		Dr. Marwa Ahmed Soliman, General Manager of international cooperation and community participation Urban Development Fund (U.D.F) Egyptian cabinet	Prof. Mohamed Gamal EIDin, Professor at the University of Alberta, NSERC Industrial Res. Chair, Canada Research Chair, Civil & Env. Eng.
		Eng. Rasha Aly AboZaid, Assistant Head of the Authority Development Sustainability & External Representation.	
11:30 am –12:00 pm	<b>Coffee Break</b>		



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Monday 16/12/2024 (continued)		Magenta Hall	Lavender Hall
12:00 pm – 12:30 pm	Session Chair :	Prof. Amal Belal; Eng. Nehad Kamel	Prof. Aly Abd El-Rahman; Prof. Maged Tawfik
		<b>Omran Business Incubator 2 Part 1</b>	<b>Launching Building Codes - 2</b>
		<b>Entrepreneurship &amp; Innovation :A breakthrough for Sustainable Development</b>	<b>Egyptian Code of Practice for Steel Construction for Buildings</b>
		Dr. Heba M. Zaki, Director of Egypt's Entrepreneurship & Innovation Center.	Prof. Sherif Mourad, Professor Emeritus, Structural Eng. Dept., Faculty of Engineering, Cairo University.
			Prof. Mohamed Massoud, Chairman of HBRC
12:30 pm – 13:15 pm	Session Chair :	Dr. Abd El-Fattah Mahmoud Ghareeb; Dr. Nahla Aly	Prof. Azza Sirry; Prof. Manal Abdelhamid; Prof. Mona Azooz
		<b>Omran Business Incubator 2 Part 2</b>	<b>Key-Note Panel Discussion - 9</b>
		<b>From Ideas to Impact: Success Stories in Construction, sustainability and Urban Innovation</b>	<b>Reconsidering City Assets Through Facility Management</b>
		Eng. Mohamed AboKelela, Co-Founder and CEO of Tilestic	Prof. Dalila El Kerdani, Professor emeritus of Architecture and Urban Design at the Faculty of Engineering, Cairo University.
		Eng. Asmaa Hefnawy, CEO of MEDMAC	Eng. Yasser Zannoun, Euro FM Ambassador, Founder and managing director of Voice of FM.
		Eng. Amr Yassin, CEO of TOBI	Eng. Sherif Maged, Africa FM Chair
		Eng. Mohamed Elzaree Founder and General Manager in MindShift	Mr. Youssef Abou Terra, Marketing Manager, Al Ismaelia for Real Estate Investment.
13:15 pm – 13:45 pm	Session Chair :	Prof. Naser Darwish; Prof. Khaled El-Zahaby; Prof. Ahmed El-Gabry	Prof. Tamer El-Affandy; Prof. Nihal Taha
		<b>Keynote Lecture - 11</b>	<b>Keynote Lecture - 12</b>
		<b>ACI Certification and the International Cooperation between ACI and HBRC</b>	<b>Application of Evolutionary Optimization Methods for Intelligent Design and Retrofit of Structures</b>
		Eng. Ahmed Mhanna, ACI Director in the Middle East	Prof. Ashraf El Damatty, Professor and Chair Department of Civil and Environmental Engineering Research Director, WindEEE Research Institute, University of Western Ontario, Canada
		Prof. Dina Sadek, Building Material Institute, HBRC	
13:45 pm – 14:00 pm	<b>Break</b>		



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14:00 pm – 14:30 pm	Session Chair :	Prof. Khaled El-Zahaby; Prof. Hesham Kamal	Prof. Samer Adeeb; Prof. Mohamed Gamal El-Din
		<b>Keynote Lecture - 13</b>	<b>Keynote Lecture - 14</b>
		Problematic Soil	Building a Resilient Future, one block at the time
		Prof. Mohie El-Mashad	Dr. C. “Lobo” Cruz-Noguez, University of Alberta, Edmonton, Alberta, Canada.
14:30 pm – 15:00 pm	Session Chair :	Prof. Maha El-Shafie; Prof. Ahmed Nour El-Din; Prof. Naser Abd El-Ghafoor	Prof. Salem El-Khodeiry; Prof. Tarek Thabet; Prof. Ibrahim El-Demery
		<b>Keynote Lecture - 15</b>	<b>Paper Session 4: Miscellaneous Topics in Construction</b>
		Applications of Advanced Oxidation Processes for the Treatment of Persistent Contaminants: Towards Sustainability	<b>Paper(5):</b> Dr. Bakr M Aly Ahmed, Green Adaptive Reuse: Challenges & the most practical approaches toward Healthy, Sustainable Cities
		Prof. Mohamed Gamal ElDin, Professor at the University of Alberta, NSERC Industrial Res. Chair, Canada Research Chair, Civil & Env. Eng.	<b>Paper(15):</b> Eng. Ahmed Salah, Assessment of the CSC risk factors for Egyptian Market based on ESG metrics
			<b>Paper (17):</b> Prof. Adel Hanna, Numerical Analysis for Sustainable Lateral Loading Resistance for Shell Foundation
			<b>Paper(19):</b> Dr. Manoj Abraham Jeyaraj, Adoption Of Biomimicry In Sustainable Construction – Example From The Coating Industry
15:00 pm – 15:30 pm	Session Chair :	Prof. Tamer El-Affandy; Prof. Hassan Alam	Prof. Azza Serri; Prof. Ibrahim El-Demery
		<b>Launching Building Codes - 3</b>	<b>Launching Building Codes - 4</b>
		Code of Principles of design and implementation of repair and strengthening of reinforcement concrete structures	Green Buildings Guidelines
		Prof. Shadia Al-Ibiary, Reinforced Concrete Institute, HBRC.	Prof. Hend Farouh, Director of Architecture Institute, HBRC
			Prof. Abbas Al Zaafarani, Professor of Environmental Design and Planning
15:30 pm – 16:15 pm	<b>Lunch</b>		
16:15 pm	<b>Pick-up Passengers by bus from Fairmont Hotel, go back to HBRC, Dokki</b>		



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8:00 AM	Pick-up Passengers by bus from HBRC, Dokki to Fairmont Hotel and Registration		
9:00 AM	Registration Through Conference Day		
09:00 am – 9:30 am	Session Chair :	Prof. Ibrahim Metwaly; Prof. Mohamed Mamdouh Abdelrahman	Prof. Sherif El-Zeiny; Prof. Tarek Thabet; Assoc.Prof. Eslam Mousa Ali
		<b>Keynote Lecture - 16</b>	<b>WorkShop - 2</b>
		Urban Housing and Infrastructure – The Benefits of Sustainable, Resilient, and Robust Concrete Construction	Behavior of RC Elements Reinforced with Different Steel Grades According to ECP203 Requirement
		Eng. Michael J. Paul, ACI -President	Prof. Tamer Hassan Kamal ElAfandy, Vice Director of Concrete Institute, HBRC.
			Prof. Hadad Saied Hadad, Head of Construction Technical Inspection Authority and Professor of Concrete Structure of Concrete Institute, HBRC.
09:30 am – 10:15 am	Session Chair :	Prof. Karim El-Dash; Assoc.Prof. Ireny Beshara; Assoc.Prof. Wafaa Arandah	Prof. Hesham Kamal; Prof. Suzan Saad Salam; Prof. Ramy El-Sherbiny
		<b>Launching Building Codes - 5</b>	<b>Workshop - 3</b>
		Egyptian BIM Guiding Standards	Simplified Procedures for the Design and Construction of Geosynthetics Reinforced walls
		Prof. Manal Abd El-Hamid, Former Director Construction Project Management research Institute, HBRC	Assoc.Prof. Hoda Hany, Assoc. Prof. at Soil Mechanics and Foundation Engineering Institute, HBRC
		Prof. Moustafa Baraka, Professor of civil engineering, Faculty of Engineering, GUC	Eng. John Erian, Chief Commercial Officer of Strata Soil Systems Company.
		Prof.Tarek Attia, Professor of Construction Engineering and Management	Eng.Mina Youssef, Senior Technical Office Engineer at Goes for Trading and contracting.
		Eng. Kamal Shawky, CEO of Updated Solution, Autodesk Reseller	
		Eng. Amr Khattab, The Official Spokesperson of the Ministry of Housing, Utilities & Urban Communities, General Manager of the Minister's Technical Office	
10:15 am - 11:00 am	Session Chair :	Prof. Mahmoud El-Kady; Assoc.Prof. Mahmoud Mokhtar	Prof. Shreen Mohamed Ahmed; Prof. Sameh Abd El-Gawad
		<b>Launching Building Codes - 6</b>	<b>Workshop - 4</b>
		Public hearing “Guidelines for implementing, testing and handover of fire resistance works”	Advanced Methods for water and waste water treatments
		Prof. Sayed Shebl, Director of EMI Institute & Head of Organizing Committee	Prof. Safaa Mahmoud Ragheb, Head of Sanitary and Environmental Engineering Institute, HBRC
		Prof. Khalid Heiza, Monofia University	
		Prof. Atef Khalil, Cairo University	
		Prof. Osama Hodhood, Cairo University	
11:00 am- 11:30 am	<b>Coffee Break</b>		



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11:30 am –12:15 pm	Session Chair :	Prof. Sayed Shebl; Prof. Azza Sirry; Prof. Tarek Attia; Prof. Ashraf Kamal	Prof. Tarek El-Sokary; Prof. Medhat El-Mahalawy
		<b>Celebrating HBRC International Collaboration</b>	<b>Workshop - 5</b>
		Celebrating collaboration with Metropolis & SHRDC Session: Reflecting on the past and looking for the future	Innovation importance of TICO for National Development
		Ms. Eunju Lee Director of SHRDC and MITI headquarter in Seoul	Prof. Mona Ahmed Mohamed Fanny, Building Physics and Environments Research Institute, Manager of TICO , HBRC
		Mr. Sunbae Lee, HRD expert & capacity building specialist, Seoul	Prof. Said Ibrahim Zaki, HBRC
		<b>International Collaboration with GIZ</b>	Asso. Prof. Samah Adel Sanad, HBRC
		<b>Build_ME, Energy Performance Certificate (EPC) Award</b>	Associate Prof. Mahmoud Mohamed Abd ElRazik, Building physics Institute, HBRC.
			Dr. Mostafa Shohide, Researcher, Applied Chemistry, HBRC.
12:15 pm –13:15 pm	Session Chair :	Prof. Mohamed Massoud; Prof. Tarek M. BahaaEl-Din; Prof. Yehia Abd El-Meged; Prof. Dr. Amal Belal; Eng. Tareq ElNabarawy	
		<b>Closing Ceremony</b>	
		<b>General Cooperation Protocol</b>	
		<b>Capacity Building Agreement</b>	
		<b>Honoring the President of the Engineers Syndicate</b>	
		<b>Excellence Awards Ceremony: Celebrating Outstanding Contributions</b>	
13:15 pm – 13:45 pm	<b>Lunch</b>		
13:45 pm	<b>Pick-up Passengers by bus from Fairmont Hotel, go back to HBRC, Dokki</b>		
		<i>Thanks for your contribution and we look forward to seeing you next year <u>December 2025</u></i>	<i>Housing and Building National Research Center</i>
		<i>Website: <a href="https://www.hbrc.edu/en/hbrc-conf2024">https://www.hbrc.edu/en/hbrc-conf2024</a></i>	<i>Conf. Email: <a href="mailto:hbrc.conf2024@hbrc.edu.eg">hbrc.conf2024@hbrc.edu.eg</a>; <a href="mailto:hbrconf2024@gmail.com">hbrconf2024@gmail.com</a></i>