





Green Smart Sustainable Building between Present & Future (GSSB 2024)

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

Sunday 15/12/2024		Magenta Hall	Lavender Hall
8:00 am – 8:30 am	Pick-up Passengers b	y bus from HBRC, Dokki to Fairmont Hotel and Registration	
9:00 AM	Registration Through	h Conference Day	
9:00 am – 9:30 am	Session Chair:	Prof. Aly Abd El-Rahman; Prof. Hadad Said	
		Keynote Lecture - 1	
		ACI International Update: New Initiatives for Sustainable concrete	
		Eng. Michael J. Paul, ACI -President	
9:30 am – 10:00 am	Session Chair:	Prof. Alaa Olama; Prof. Sayed Shebl	
		Keynote Lecture - 2	
		Strengthening Access to Sustainable Cooling in Response to Extreme Heat	
		Dr. Yosr Allouche, Director General of the Paris-based International Institute of Refrigeration (IIR)	
10:00 am - 10:45 am	Session Chair:	Prof.Tarek El-Sheikh	Prof. Ashraf Kamal
		Key-Note Panel Discussion - 1	Key-Note Panel Discussion - 2
		Creative transformations for the future of urbanization and construction in cities	The present and future prospects of Green Buildings Certification in Egypt
		Prof. Dr. Mohamed Massoud, Chairman of HBRC	Prof. Mohamed Salheen, IDG
		Prof. Ahmed Shalaby, CEO of Tatweer Misr Real State Company	Eng Eslam Mahdy, Guidehouse, Germany
		Prof. Mohamed Abdel-Kader, Professor of Architecture in Cairo University.	Eng. Ahmed Attallah, Badya Project
		Eng. Tarek Shokry, chairman of board of director of Real State development chamber	Eng. Nermin Barakat, Bank Masr
10:45 am- 11:30 am	Session Chair :	Eng. Ayman El-Talouny	Prof. Manal Abd El-Hamid; Assoc.Prof. Sahar Shahat; Assoc.Prof. Nora Osama
		Key-Note Panel Discussion - 3	Paper Session 1: Towards Sustainable Construction: Trends and Challenges
		IIR Cool Dialogue: Policy Innovations, and Financial Solutions for a Sustainable Cooling Technology in MENA	Paper(24): Dr. Bakr M Aly Ahmed, What makes a city a green city? From gray to green: futuristic vision for re-naturing modern urbanity
		Prof. Alaa Olama, Chair of Egyptian Permanent Committee of Refrigeration and Air-Conditioning; Member of the Montreal Protocol Technical Options Committee (RTOC)	Paper(26): Dr. Sarah I. Hassan, Integrating AI tools in envisioning conceptual urban design for historical regions, case study: (the grand avenue of the pyramids of Giza)
		Dr. Yosr Allouche, Director General of the International Institute of Refrigeration (IIR)	Paper(27): Prof.Talaat Salama, Survey Of The Service Life And Management Of Sign Support Structures
		Eng. Souhir Al-Hammami, Director of Scientific and Technical Information International Institute of Refrigeration (IIR)	Paper (28): Dr.Nada A. Mustafa, Refining housing needs estimations in Egypt: towards socioeconomic sustainability
		Eng Mohamed Abdelhameed, Managing Director of the Development Finance Advisers (ADF)	Paper(31): Eng. Amal Nagi Ezzat Ahmed, Key capabilities & competencies for managing sustainability and change in Egypt's AEC industry
11:30 am –12:00 pm		Coffee Break	
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Sunday 15/12/2024 (co	ontinued)	Magenta Hall	Lavender Hall
12:00 pm – 12:45 pm	Session Chair:	Prof. Rafik Abbas; Prof. Hend Farouh	Assoc.Prof. Ibrahim Abotaleb; Assoc.Prof. Sherif Goubran; Prof.Ahmed El-Gabry
		Key-Note Panel Discussion - 4	Key-Note Panel Discussion - 5
		Green Building Finance: Challenges & Opportunity	Beyond Green: Pioneering Sustainable, Low-Carbon Building Practices
		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.	Eng. Michael J. Paul, President of the American Concrete Institute
		Dr. Marwa Mahgoub, IFC representative	Eng. Omar Ghaly, CEO and Founder of Egyptian Carbon Center
		Eng. Emad Hassan, project manager green economy financing facility, EBRD	Eng. Karim El Sabee, CEO of Zero Carbon
		Eng. Aly Ibrahim, general manager of bank Ahly project	
12:45 pm – 13:15 pm	Session Chair:	Prof. Sherief El-Zeiny; Prof.Sherif Khafaga; Prof. Ashraf El-Zanaty	Eng. Nafissa Hashem; Prof. Ibrahim El-Demery
		Launching Building Codes - 1	Keynote Lecture - 3
		Egyptian Code for the Design and Construction of Concert Structures	The Urban Resilience in Madinah, Saudi Arabia
		Code of High Rise Buildings	Eng. Abdulrahman Ibrahim, Chief Data and Innovation Officer, Madinah Region Development Authority, Saudi Arabia.
		Prof. Dr. Aly Abdel Rahman Youssef, Chair, The Egyptian Code for the Design and Construction of Concert Structures	
13:15 pm – 13:45 pm	Session Chair:	Prof. Talaat Salama; Assoc.Prof. Ireny Beshara	Prof.Sherif Mourad; Prof. Yehia Abd El-Meged; Prof. Ashraf El-Zanaty
		Keynote Lecture - 4	Paper Session 2: Concrete Technology
		Sustainable Buildings and Infrastructure Asset Management	Paper(1): Eng.Nabil Youssef Nabil, Experimental Study on Fiber Reinforced Concrete (FRC) Beams with Splices
		Prof. Osama Salem, Professor and former Department Chair of Civil, Environmental, and Infrastructure Engineering, George Mason University	Paper (2): Dr. Rishi Gupta, Development of Fly Ash-based Geopolymer Concrete for Sustainable Infrastructure
			Paper (23): Prof. Ashraf M. Ghaly, Evaluating Sustainability Of Infrastructure Using The Envision Rating System
			Paper (25): Dr.Nesreen Elawadly, Examining the Long-Term Mechanical Properties and Durability of Green Concrete with Recycled Glass as Fine Aggregate: Validation Using the Neural Network Fitting Tool
13:45 pm – 14:00 pm	Break		







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

Sunday 15/12/2024 (continued)		Magenta Hall	Lavender Hall
14:00 pm – 14:30 pm	Session Chair:	Prof. Hanan El-Nouhy	Prof. Yehia Abd El-Meged; Prof. Tamer El-Affandy
		Keynote Lecture - 5	Keynote Lecture - 6
		ICC's Global Overview: Family of Solutions and their role in advancing Sustainability and Innovation	Methodology to Design Eco-Friendly Fiber-Reinforced Concrete for 3D Printing
		Eng. Mohamed Amer, the Regional Director of Operations for the MENA region with	Prof. Kamal H. Khayat, Vice Chancellor for Research and Innovation at Missouri
		the International Code Council (ICC).	University of Science and Technology - USA.
14:30 pm – 15:00 pm	Session Chair:	Prof. Tarek El-Sokary; Prof. Amal Belal	Prof. Suzzan Saad; Prof. Osama Hodhod
		Omran Business Incubator 1 Part 1	Keynote Lecture - 7
		Entrepreneurship as a Catalyst for a Sustainable Future: Empowering the Green Economy	Future of Wind Energy – Chances & Challenges
		Prof. Mohamed Galal; Director of Innovation and Entrepreneurship Center, Al-Azhar University	Dr. Khalid Abdel-Rahman, Deputy Head- IGtH - LUH, Germany
15:00 pm – 15:30 pm	Session Chair:	Prof. Amal Belal; Eng. Alia El-Sayed	Prof. Medhat El-Mahlawy
		Omran Business Incubator 1 Part 2	Platinum Sponsor - Sphinx Glass
		Entrepreneurship in the Era of AI and Sustainability: Trends, Innovations, Future Opportunities and Funding	Bronze sponsor - Arab Contractors Company
		Dr. Mohamed Kholief; Senior Innovation Entrepreneurship Digital Transformation and	Eng. Heba Abo Elala Board member, Arab Contractors Company
		Strategy Consultant	Lecture title "Pre-Cast works"
15:30 pm – 16:15 pm		Lunch	
16:45 pm		Pick-up Passengers by bus from Fairmont Hote	l, go back to HBRC, Dokki







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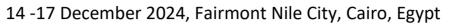
Monday 16/12/2024		Magenta Hall	Lavender Hall
8:00 am – 8:30 am 9:00 AM	Pick-up Passengers by bus from HBRC, Dokki to Fairmont Hotel and Registration Registration Through Conference Day		
9:00 am – 9:30 am	Session Chair:	Prof. Amr Aly Abd El-Rahman; ; Prof.Osama Hodhood; Prof. Dina Sadek	Prof. Ahmed El-Gabry; Eng. Mohamed El-Refay
		Keynote Lecture - 8	Keynote Lecture - 9
		Optimization Ultra-High performance concrete properties through advanced Rheological design and Nano-technology	Green Building Solution
		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	Session Chair:	Prof. Ahmed El-Gabry; Prof. Sherif Khafaga	Prof. Ashraf Kamal; Assoc.Prof. Hoda Shaker
		Keynote Lecture - 10	Paper Session 3: Energy in Construction and Building Materials
		Future Directions in Road Safety Research	Paper (4): 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.	Paper (8): Dr. Ahmed Hammad, Enhancing Building Energy Management For Climate Resilience And Sustainability: Integrating MATLAB, IOT, And KBDSS
			Paper (7): Dr. Bakr M Aly Ahmed, SUCCESS OF NEW GREEN & SMART CITIES: THE LINE, NEOM-ECONOMIC, ENVIRONMENTAL, and SOCIAL IMPACTS
			Paper (13): Dr. Yuxiang Chen, Adjustments of Existing Analytical Methods for Estimating the Effective Thermal Resistance of Masonry Veneer Walls
10:00 am - 10:45 am	Session Chair:	Dr. C. "Lobo" Cruz-Noguez	Prof. Ahmed El-Gabry; Prof. Sayed Hussien
		Key-Note Panel Disscussion - 6	Workshop - 1
		Role of Technology in Civil Engineering	Use of Plastic Waste in Road Construction
		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	Session Chair:	Prof. Reham Mohamed Hafez	Prof. Dina Salem; Prof. Sara Ibrahim; Dr. Yuxiang Chen
		Key-Note Panel Discussion - 7	Key-Note Panel Disscussion - 8
		Women Leadership in Urban Development: lessons from Practical Experience	Energy and Sustainability
		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 ElDin, 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		_ Coffee Break	
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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
		Omran Business Incubator 2 Part 1	Launching Building Codes - 2
		Entrepreneurship & Innovation : A breakthrough for Sustainable Development	Egyptian Code of Practice for Steel Construction for Buildings
		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
		Omran Business Incubator 2 Part 2	Key-Note Panel Discussion - 9
		From Ideas to Impact: Success Stories in Construction, sustainability and Urban Innovation	Reconsidering City Assets Through Facility Management
		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
		Keynote Lecture - 11	Keynote Lecture - 12
		ACI Certification and the International Cooperation between ACI and HBRC	Application of Evolutionary Optimization Methods for Intelligent Design and Retrofit of Structures
		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		Break	







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Monday 16/12/2024 (continued)		Magenta Hall	Lavender Hall
14:00 pm – 14:30 pm	Session Chair:	Prof. Khaled El-Zahaby; Prof. Hesham Kamal	Prof. Samer Adeeb; Prof. Mohamed Gamal El-Din
		Keynote Lecture - 13	Keynote Lecture - 14
		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
		Keynote Lecture - 15	Paper Session 4: Miscellaneous Topics in Construction
		Applications of Advanced Oxidation Processes for the Treatment of Persistent Contaminants: Towards Sustainability	Paper(5): 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.	Paper(15): Eng. Ahmed Salah, Assessment of the CSC risk factors for Egyptian Market based on ESG metrics
			Paper (17): Prof. Adel Hanna, Numerical Analysis for Sustainable Lateral Loading Resistance for Shell Foundation
			Paper(19): 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
		Launching Building Codes - 3	Launching Building Codes - 4
		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		Lunch	
16:15 pm		Pick-up Passengers by bus from Fairmont Hote	el, go back to HBRC, Dokki





HBRC I

Housing & Building National Research Center International Conference Future Vision & Challenges for Urban Development

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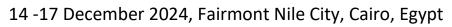
Tuesday 17/12/2024		Magenta Hall	Lavender Hall	
8:00 am – 8:30 am	Pick-up Passengers b	y bus from HBRC, Dokki to Fairmont Hotel and Registration		
9:00 AM	Registration Through Conference Day			
09:00 am – 9:30 am	Session Chair:	Prof. Ibrahim Metwaly; Prof. Mohamed Mamdouh Abdelrahman	Prof. Sherif El-Zeiny; Prof. Tarek Thabet; Assoc.Prof. Eslam Mousa Ali	
		Keynote Lecture - 16	WorkShop - 2	
		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	
		Launching Building Codes - 5	Workshop - 3	
		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	
		Launching Building Codes - 6	Workshop - 4	
		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		Coffee Break		







Green Smart Sustainable Building between Present & Future (GSSB 2024)





Tuesday 17/12/2024 (continued)		Magenta Hall	Lavender Hall
11:30 am –12:15 pm	Session Chair:	Prof. Tarek M. BahaaEl-Din; Prof. Azza Sirry; Prof. Tarek Attia; Prof. Ashraf Kamal	Prof.Tarek El-Sokary; Prof. Medhat El-Mahalawy
		Celebrating HBRC International Collaboration	Workshop - 5
		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
		International Collaboration with GIZ	Asso. Prof. Samah Adel Sanad, HBRC
		Build_ME, Energy Performance Certificate (EPC) Award	Associate Prof. Mahmoud Mohamed Abd ElRazik, Building physics Institute, HBRC.
			Dr. Mostafa Shohide, Researcher, Applied Chemistry, HBRC.
12:15 pm –12:45 pm	Session Chair:	Prof. Mohamed Massoud; Prof. Tarek M. BahaaEl-Din; Prof. Yehia Abd El-Mege	d
		Signing ceremony for the technical and training services protocol with the Engineers Syndicate.	
		Signing ceremony for the protocol on fire protection consultancy services with the Engineers Syndicate.	
		Honoring the President of the Engineers Syndicate	
12:45 pm – 13:15 pm	Session Chair:	Prof. Sayed Shebl	
		Closing Ceremony	
		Prof. Dr. Mohamed Massoud, Chairman of HBRC	
		Prof. Dr. Tarek M. Bahaa El-Din- Deputy Chairman of the Board for Studies and Research Affairs HBRC	
		Prof. Yehia Abd El-Meged - Deputy Chairman of the Board for Member Affairs HBRC	
		Prof. Dr. Amal Belal - HBRC General Trustee	
13:15 pm – 13:45 pm		Lunch	
13:45 pm		Pick-up Passengers by bus from Fairmont Hot	el, go back to HBRC, Dokki
	Thanks for your co	ntribution and we look forward to seeing you next year <u>December 2025</u>	Housing and Building National Research Center
	Website: https://ww	vw.hbrc.edu.eg/en/hbrc-conf2024	Conf. Email: hbrc.conf2024@hbrc.edu.eg;hbrcconf2024@gmail.com
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