



THE ELEVENTH ALEXANDRIA INTERNATIONAL CONFERENCE ON STRUCTURAL, GEOTECHNICAL ENGINEERING, AND MANAGEMENT

CONFERENCE SCHEDULE

ORGANIZED BY: THE STRUCTURAL ENGINEERING DEPARTMENT, FACULTY OF ENGINEERING, ALEXANDRIA UNIVERSITY, EGYPT

HELNAN PALESTINE HOTEL

ALEXANDRIA, EGYPT

18-19 December 2023

Organized By:

STRUCTURAL ENGINEERING DEPARTMENT, FACULTY OF ENGINEERING, ALEXANDRIA UNIVERSITY, ALEXANDRIA, EGYPT

UNDER THE AUSPICES OF

Prof. Mohamed Ayman Ashour

Minister of Higher Education & Scientific Research.

Prof. Abd El-Aziz Konsowa

President, Alexandria University.

Prof. Said Allam

Conference Chairman, Vice President for Community Service and Environmental Development Affairs, Alexandria University.

Prof. Mohamed Elheweity

Conference Scientific Chairman, Chairman Structural Engineering Department.

Prof. Ahmed Tarabia

Conference General Secretary.

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A. Prof. Hazem F. Elbakry

The views and opinions expressed here in the proceedings are those of the paper's authors and are not necessarily of the Faculty of Engineering of Alexandria University.

Preface

This is the Eleventh Alexandria International Conference on Structural, Geotechnical Engineering, and Management (AICSGE 11) organized by the Structural Engineering Department, Alexandria University, Egypt. The previous ten conferences were organized and held by the structural engineering department, as a good opportunity to provide engineers, consultants, and researchers with a remarkable forum to discuss recent developments in different aspects, of structural and geotechnical engineering.

This eleventh conference like its predecessors is characterized by the participation of numerous distinguished international speakers and keynote presentations, besides; it has attracted many high-quality technical papers from all over the world. The conference has attracted about forty technical and scientific papers from Egyptian Universities as well as from Arab and foreign countries excluding keynote lectures. Sixteen keynote lectures will be presented by prominent experts in their fields, in three plenary sessions throughout the first, and second days of the conference. The technical papers will be presented in groups of 3 parallel sessions throughout the two days of the conference. Also, prominent keynote speakers from all around the world, will present special case studies and modern engineering practice.

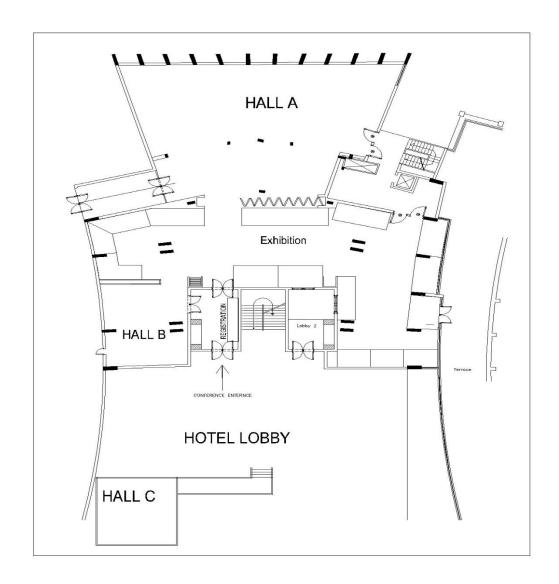
On behalf of my colleagues and myself, I wish to express my sincere gratitude to the members of the scientific and organizing committees and all collaborators and assisting staff for their devotion, tireless efforts, and patience in preparing for the conference. I would also like to thank all the distinguished reviewers for their time and valuable efforts. The facilitative assistance provided by the faculty of engineering, Alexandria University was essential to the conference. The contribution of the conference sponsoring ministries, organizations authorities, and cosponsoring companies and enterprises is highly acknowledged. We extend our gratitude to each of them. Your participation and cooperation whether authors, chairmen, or attendees is highly appreciated. Without such cooperation, and participation, this event would not have been possible. Last but not least, we wish you all a successful event and for the dissemination of information on the recent innovations in structural, geotechnical engineering, and management.

Prof. Said Allam

Conference Chairman,

Vice President for Community Service and Environmental Development Affairs, Alexandria University.

December 2023



Floor plan Conference Halls and Lobby, Helnan Palestine Hotel.

AICSGE11

CONFERENCE SCHEDULE

18-19 DECEMBER 2023

Тіме	ACTIVITY	LOCATION
9:00 - 5:00	REGISTRATION	LOBBY
10:45 - 11:30	OPENING SESSION WELCOMING REMARKS Prof. Ahmed Tarabia General Secretary. Prof. Mohamed Elheweity Scientific Chairman, Chairman Structural Engineering Department. Prof. Essam Wahba Acting Dean of Faculty of Engineering, Alexandria University. Prof. Said Allam Conference Chairman, Vice President of Alexandria University. Prof. Abd El-Aziz Konsowa. President, Alexandria University. Prof. Mohamed Ayman Ashour Minister of Higher Education and Scientific Research.	HALL A
11:30 - 12:00	EXHIBITION OPENING	EXHIBITION HALL
12:00 - 12:30	COFFEE BREAK 1	LOBBY
12.30 - 12:55	<u>Session (I)</u> Keynote Lecture KN1	Hall A
1:00 - 1:45	<u>Session (II)</u> Keynote Lecture KN2 (ACI PRESIDENT)	Hall A
1:50 - 2:15	Session (III) Keynote Lecture KN3	Hall A
2:15 - 2:40	<u>Session (IV)</u> Keynote Lecture KN4	Hall A
2:45 - 3:10	Session (V) Keynote Lecture KN5	Hall A
3:10 - 3:35	Session (VI) Keynote Lecture KN6	Hall A
3.35 – 4:00	Session (VII) Keynote Lecture KN7	Hall A
4:00 - 4:20	COFFEE BREAK 2	LOBBY
4:20 – 4:45	<u>Session (VIII)</u> Keynote Lecture KN8	Hall A
4:50 - 5:15	Exhibitors Talks (1): YTONG	Hall A
5:25 – 5:55	Exhibitors Talks (2): Ezz Steel (20 min.) Novochem (10 min.)	Hall A
6:00 - 7:30	SESSION 1: TECHNICAL PARALLEL SESSIONS Session 1 (RC A) Session 1 (CM A) Session 1 (MS A)	Hall A Hall B Hall C
7:40 - 9:00	Conference Dinner (For Participants By Tickets Only)	RESTAURANT

Тіме	ACTIVITY	LOCATION
8:30 - 3:00	REGISTRATION	LOBBY
9:00-10:30	SESSION 2: TECHNICAL PARALLEL SESSIONS Session 2 (RC B) Session 2 (ST A)	HALL A HALL B
10:40-11:05	Session (IX) Keynote Lecture KN9	HALL A
11:10-11:35	Session (X) Keynote Lecture KN10	HALL A
11:40-12:05	Session (XI) Keynote Lecture KN11	HALL A
12:05-12:30	COFFEE BREAK 3	LOBBY
12:30-12:55	Session (XII) Keynote Lecture KN12	HALL A
1:00-1:25	Session (XIII) Keynote Lecture KN13	HALL A
1:30-1:55	Session (XIV) Keynote Lecture KN14	HALL A
2:00-2:25	Session (XV) Keynote Lecture KN15	HALL A
2:30-4:00	SESSION 3: TECHNICAL PARALLEL SESSIONS Session 3 (RC C) Session 3 (ST B) Session 3 (EM A)	HALL A HALL B HALL C
4:00 - 4:30	COFFEE BREAK 4	LOBBY
4:35 - 5:35	Exhibitors Talks (3): NCC - GMIX - ARAB CONTRACTORS	HALL A
5:45- 6:15	Exhibitors Talks (4): AMREYAH CEMENT - PENETRON- AL-BADR	HALL A
6:20-7:20	SESSION 4: TECHNICAL PARALLEL SESSIONS Session 4 (GT A) Session 4 (AR A)	HALL A HALL B
7:30 - 9:30	Conference Dinner (For Participants By Tickets Only)	RESTAURANT

Scientific Sections Abbreviations:

GT = Geotechnical Engineering

CM = Construction Management

MS = Metallic Structures

EM = Materials & Testing

RC = Reinforced Concrete

ST = Structural Analysis

AR= Architectural Engineering

List of Sessions according to Halls

		HALL A	Hall B	Hall C
M	onday, 18 Decemb	ber 2023		
Registration	9:00 - 5:00			
Opening Session	10:45 - 11:30	Opening Sess.		
Exhibition opening	11:30 - 12:00			
Coffee Break (1)	12:00 - 12:30			
Keynote 1	12.30 - 12:55	KN1		
Keynote 2	1:00 - 1:45	KN2		
Keynote 3	1:50 - 2:15	KN3		
Keynote 4	2:15 - 2:40	KN4		
Keynote 5	2:45 - 3:10	KN5		
Keynote 6	<i>3:10 - 3:35</i>	KN6		
Keynote 7	3.35 – 4:00	KN7		
Coffee Break (2)	4:00 - 4:20			I
Keynote 8	4:20 - 4:45	KN8		
Exhibitor Talks (1) HALL A	4:50 - 5:15		YTONG	
Exhibitor Talks (2) HALL A	5:25 - 5:55	EZZ STE	EL- NOVOCI	HEM
Session 1	6:00 - 7:30	RC A	CM A	MS A
Dinner	7:40-9:00pm			
Tu	uesday, 19 Decemb	ber 2023		
Session 2	9:00-10:30	RC B	ST A	_
Keynote 9	10:40-11:05	KN9		
Keynote 10	11:10-11:35	KN10		
Keynote 11	11:35-12:00	KN11		
Coffee break	12:00-12:30			
Keynote 12	12:30-12:55	KN12		
Keynote 13	1:00-1:25	KN13		
Keynote 14	1:30-1:55	KN14		
Keynote 15	2:00-2:25	KN15		
Session 3	2:30-4:00	RC C	ST B	EM A
Coffee break	4.00-4.30			
Exhibitor Talk (3) HALL A	4:35 - 5:35	NCC - G MIX – SPACE - THE ARAB CONTRACTORS		
Exhibitor Talk (4) HALL A	5:45- 6:15	AMREYAH CEMENT – PENETRON EGYPT - AL BADR		
Session 4	6:20-7:20	GT A	AR A	
Conference Dinner	7:30-9:30pm			

List of Sessions according to Subject

		Keynote	GT	CM	RC	MS	EM	ST	AR
		Mono	day, 18 I	Decemb	er 2023	3			
Opening Session	10:45 - 11:30	Hall A							
Keynote 1	12.30 - 12:55	KN1 Hall A							
Keynote 2	1:00 - 1:45	KN2 Hall A							
Keynote 3	1:50 - 2:15	KN3 Hall A							
Keynote 4	2:15 - 2:40	KN4 Hall A							
Keynote 5	2:45 - 3:10	KN5 Hall A							
Keynote 6	3:10 - 3:35	KN6 Hall A							
Keynote 7	3.35 – 4:00	KN7 Hall A							
Keynote 8	4:20 – 4:45	KN8 Hall A							
Session 1	6:00 - 7:30			CM A Hall B	RC A Hall A	MS A Hall C			
		Tueso	day, 19 l	Decemb	er 2023	3			
Session 2	9:00-10:30				RC B Hall A			ST A Hall B	
Keynote 9	10:40-11:05	KN9 Hall A							
Keynote 10	11:10-11:35	KN10 Hall A							
Keynote 11	11:35-12:00	KN11 Hall A							
Keynote 12	12:30-12:55	KN12 Hall A							
Keynote 13	1:00-1:25	KN13 Hall A							
Keynote 14	1:30-1:55	KN14 Hall A							
Keynote 15	2:00-2:25	KN15 Hall A							
Session 3	2:30-4:00				RC C Hall A		EM A Hall B	ST B Hall B	
Session 4	6:20-7:20		GT A Hall A						AR A Hall B

CONTENTS OF KEYNOTE SESSIONS

<i>J</i> ,	Keynote Session (I), (KN1)
12.30 - 12:55	Monday, 18 December – Hall A
Chairmen: Prof Abd	El-Aziz Konsowa, Prof. Said Allam, Prof. Essam Elkordy
Chairmen, 1 roj. 110a	Li 1122, Konsowa, 1 10j. Bata 11tani, 1 10j. Essan Etkoray
12.30 - 12:55	Special Session
1:00 - 1:45	Keynote Session (II), (KN2)
	Monday, 18 December – Hall A
Chairmen: Prof. Aly A	Abdel Rahman, Prof. Wael El degwy, Prof. M. Nasser Darwish
	- Non-Metallic Concrete Reinforcement: GFRP
	Materials Building Code, Field Applications and R&D
	- ACI Presentation: Centers of Excellence
1:00 - 1:45	Prof. Antonio Nanni
	Prof. Dept. Civil Eng., Univ. of Miami, Florida, USA ACI President
	ACI President
1.50 2.15	Keynote Session (III), (KN3)
1:50 - 2:15	Monday, 18 December – Hall A
Chairmen: Prof. Hesh	am Abdel Khalek, Prof. Mohamed Zakzouk, Prof. Samer Ezzeldin
	Construction Trends in the Era of Artificial Intelligence
1:50 - 2:15	Prof. Tarek Hegazi
1:30 - 2:13	Civil Eng. Dept. Univ. of Waterloo, Ontario, Canada
	5 3p. 5 5
2.15 2.40	Keynote Session (IV), (KN4)
2:15 - 2:40	Monday, 18 December – Hall A
Chairmen: Prof. Mal	hmoud Reda, Prof. Omaima Salah Eldin, Prof. Shafik Khoury
	New Materials and Technologies for Durability & Conservation
	of Building Heritage
2:15 - 2:40	Prof. Luigi Coppola
2.10	Prof. Dept. Civil Eng., Univ. of Bergamo, Italy
	Fior. Dept. Civil Ling., Offiv. of Berganio, Italy

	a . (**)
2:45 - 3:10	Keynote Session (V), (KN5)
	Monday, 18 December – Hall A
Chairmen: Pro	of. Amr Abdel Rahman, Prof. Emad Etman, Prof. Zaki M. Ibrahim
	FRP for Sustainable Bridges and Structures
2:45 - 3:10	Prof. Sami Rizkalla
2.70 2.10	North Carolina, State University, N.C., USA
	·
<i>3:10 - 3:35</i>	Keynote Session (VI), (KN6)
	Monday, 18 December – Hall A
Chairmen: Pro	of. Sherif Mourad, Prof. Tarek Ebeido, Prof. Ayman Seleemah
	Advancing the Resilience of Critical Infrastructure Using Shape
<i>3:10 - 3:35</i>	Memory Alloys
3:10 - 3:33	Prof. Bassem Andrawes
	Univ. of Illinois Urban Champ., IL., USA
	Keynote Session (VII), (KN7)
3.35 - 4.00	Monday, 18 December – Hall A
Chairmen: Pro	of. Omar Elnawawy, Prof. Ashraf Elzanaty, Prof. Mohamed Elheweity
	Arab contractors Megaprojects
	.
3.35 - 4.00	Eng. Heba Abo Elela
	Board Member- THE ARAB CONTRACTORS
	Osman Ahmed Osman & Co.
	Keynote Session (VIII), (KN8)
4:20 – 4:45	Monday, 18 December – Hall A
Chairmen: Pro	of. Said Allam, ;Prof. Sherif Hafez, Prof. Ahmed Abotabikh
4:20 – 4:45	Mr. Mohamed Samy Saad
	EFCBC CHAIRMAN
	EFCDC CHAINIVIAIN

10:40-11:05	Keynote Session (IX), (KN9)
	Tuesday, 19 December – Hall A
Chairmen: Prof.	Kamal Sharobeem, Prof. Sherif Fakhry, Prof. Ashraf Ragab
	Innovative Materials and Advanced Testing Methods for
	Enhanced Structural Safety during Extreme Events
10:40-11:05	Prof. Riadh Al Mahaidi
	Professor, University of Swinburne, Melbourne, Australia
	Keynote Session (X), (KN10)
11:10-11:35	m 1 10 D 1 W 11 4
	Tuesday, 19 December – Hall A
Chairmen: Prof.	Mohie Shoukry, Prof. Magdy Kassem, Prof. Ahmed Atta
	Advances In Prestressed Bridge Design And Construction Using
	Corrosion-Resistant Reinforcements
11:10-11:35	Prof. Abdul DJelil Belarabi
	Univ. of Houston Texas, USA
11:35-12:00 Keynote Session (XI), (KN11)	
11:55-12:00	Tuesday, 19 December – Hall A
Chairmen: Prof Hamdy	Abdelsalam Salem, Prof. Khaled El-Zahaby, Prof. Ala Ata, Prof. M. Hesham
110	Challenges for Advance Modelling of Geotechnical Problems
11 25 12 00	Prof. Khaled Abd El Rahman
11:35-12:00	Institute of Geotechnical Engineering, Hannover University, Germany
12.20 12.55	Keynote Session (XII), (KN12)
12:30-12:55	Tuesday, 19 December – Hall A
Chairmen: Prof.	Mourad Bakhoom, Prof. Mohamed Daboun, Prof. Hamdy Abou-Elfath
	Comparison Between International Codes & Application Of
	Performance Based Design In Wind Engineering
12:30-12:55	Prof. Ashraf El Damaty
	Dept. of Civil Engineering, Western Univ., Ontario, Canada
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1:00-1:25	Keynote Session (XIII), (KN13) Tuesday, 19 December – Hall A
Chairmen: Prof. 1	Mohamed Rabei, Prof. Mohamed Saad, Prof. Ahmed Tarabia
	Structural Health Monitoring In Infrastructure Projects: Overview
	& Applications
1:00-1:25	Prof. Ayman Okeil
	Louisiana State Univ., Baton Rouge, Louisiana, USA
1:30-1.55	Keynote Session (XIV), (KN14)
	Tuesday, 19 December – Hall A
Chairmen: Prof. A	Abdel Hakim Abdel Khalek , Prof. Mohamed Masood, Prof. Abdel Reheem El desouky
	Bridge Girder Construction Using ASTM A1010 Stainless Steel
	Prof. Khaled Sennah
1:30-1.55	Faculty of Engineering and Architectural Science, Ryerson University of Toronto Ontario,
	Canada
2:00-2:25	Keynote Session (XIV), (KN15)
2:00-2:23	Tuesday, 19 December – Hall A
Chairmen: Prof. 1	M. Awad Bahr , Prof. M. Elgarib Sakr, , Prof. Mostafa Elsawaf, Prof. Khaled Gaaver
	Soil Structure Interaction Of Buried Structures
2:00-2:25	Prof. Hani El Naggar
	Civil Eng. Dept., Dalhousie Univ., Halifax, Nova Scottia, Canada, Canada

CONTENTS OF TECHNICAL SESSIONS

6:00 - 7:30	TECHNICAL PARALLEL SESSIONS Monday, 18 December 6:00 - 7:30 Hall A	Session 1 (RC A)
Chairmen: P	rof. Ayman Hussein Hosny, Prof. Hamed Hadhood, Pro	f. El-Tony M. El-Tony
	RC1 EMPIRICAL FRAGILITY CURVES FOR BUILDINGS M. M. Hassan, A. Mamdouh, S. S. Mourad	IN HISTORIC CAIRO
	RC3 EXPERIMENTAL AND FINITE ELEMENT INVESTIGE CONCRETE-FILLED STEEL TUBULAR COLUMNS O. F. Kharoob, M. H. El-Boghdadi, Aza. M. Elagamey	GATIONS OF HEXAGONAL
6:00 - 7:30	RC4 BEHAVIOR OF RC-BEAMS MADE WITH RECYCLE AGGREGATE Emad E. Etman, Mohamed Hussein Mahmoud, Nesre A.Abdelaziz, Abdelaziz Nabil	
	RC18 EFFECT OF WRAPPING SYSTEM ON THE FLEXU STRENGTHENED RC BEAMS WITH VARIABLE DEPTH Abdel-Hakim A. Khalil, Emad E. Etman, Ahmed T. Bara	
	RC19 EXPERIMENTAL INVESTIGATION OF LIGHTWE STRENGTHENED USING RUBBERIZED GFTM-SHCC	IGHT RC BEAMS
	Mohamed E. Issa, Naser F. El-Shafey, Ahmed T. Barag	hith, Ehab N. Balat
	RC20 FLEXURAL BEHAVIOR OF RC BEAMS PRESTRES BARS	SSED WITH GLASS FRP
	Abd El-Hakim A. Khalil, Mohamed Hussein, Reda N. B	ehairy, Mahmoud E.Elbaz

	December 2025
6:00 - 7:30	TECHNICAL PARALLEL SESSIONS Monday, 18 December 6:00 - 7:30 Hall B Session 1 (CM A)
Chairmen: P	rof. Kareem Eldesh, Prof. Ahmed Hussein, Prof. Sherif Hafez
6:00 - 7:30	CM4 TIME-COST-QUALITY-ENVIRONMENTAL IMPACT-SOCIAL IMPACT TRADE-OFF FOR INFRASTRUCTURE PROJECTS: A REVIEW Emad Elbeltagi, Emad Etman, Tamer Elkorany, Haytham Sanad, Mohamed Gaber CM5 WASTE FACTORS INTERDEPENDENCY MODEL OF HOUSING INFRASTRUCTURE PROJECT N. Aljarallah, A. Alsugair, A. Al Mohsen, K. Al-Gahtani, N. Alsanabani CM6 SELECTION OF TRENCHING EQUIPMENT USING ANALYTICAL HIERARCHY PROCESS DECISION SUPPORT SYSTEM (AHP-DSS) Esraa M. Abdelwaged, Sherif I. Abdelkhalek, Mohammed S. Elsharkawy, Adel I. Eldosouky CM9 ENHANCING THE RESULTS OF THE COLLAPSED AS BUILT DELAY ANALYSIS
	TECHNIQUE OVERCOMING THE CONCURRENCY ASSESSMENT DRAWBACK USING AN AUTOMATED MODEL Sherif Mohamed Hafez, Yasser El Fahham , Mohamed Magdy Mohamed Hassan TECHNICAL PARALLEL SESSIONS
6:00 - 7:30	Monday, 18 December 6:00 - 7:30 Hall C Session 1 (MS A)
Chairmen: P.	rof. Abdel Aziz Mahmoud, Prof. Mohamed Mohamadeen, Prof. Nabil Mahmoud
	MS1 COMPARISON OF SEISMIC PERFORMANCE BETWEEN BRACED FRAME MODULAR STEEL BUILDING AND ORDINARY BRACED FRAME SYSTEM M. A. Abdelkreem, A. M. Khalifa, O. A. Mahmoud MS2 COMPARISON OF MACHINE LEARNING MODELS AND STANDARD CODES FOR COMPRESSIVE STRENGTH OF CIRCULAR CONCRETE-FILLED STEEL TUBULAR COLUMNS Khaled megahed, Nabil Said Mahmoud, Saad Elden mostafa
6:00 - 7:30	MS3 ANALYSIS AND DESIGN OF SILOS Ahmed Almohamady MS4 NUMERICAL ANALYSIS FOR SEISMIC PERFORMANCE OF THE BEAM-TO-BEAM COMBINED SIDE COLUMN JOINT FOR MODULAR BUILDING SYSTEMS A. K. Soliman, A. M. Khalifaand, O. A. Ibrahim
	MS9 BEHAVIOR OF NEW COLD FORMED STEEL BEAM COLUMN CONNECTION UNDER STATIC LOADING Ahmed S. Fahmy, Sherine M. Swelem, Rimon.N. Ramzy

9:00-10:30	TECHNICAL PARALLEL SESSIONS	
	Tuesday, 19 December 9:00-10:30 Hall B Session 2 (RC B)	
Chairmen: Prof. Magdy Kassem, Prof. Mohamed Rabei, A. Prof. Hazem Elbakry		
	RC5 BEHAVIOR AND STRENGTH OF REINFORCED CONCRETE HAUNCHED	
	BEAMS SUBJECTED TO SHEAR LOADING	
	T. I. Ebeido, H. M. El-Telwani, M. A. Diab	
	RC6 STRUCTURAL HEALTH MONITORING OF PRECRACKED RC BEAMS	
9:00-10:30	Abdelrahman Elbaz, Khaled Heiza , Khaled Heiza	
	RC9 REPAIRING OF CORROSION-DAMAGED RC SLABS WITH TEXTILE-	
	REINFORCED STRAIN HARDENING CEMENTITIOUS COMPOSITES LAYER	
	Tarek F. El-Shafiey, Mohamed H. Mahmoud, Ali Hassan, Essam Khaled	
	RC10 EMBEDDED GALVANIC ANODES FOR TARGETED PROTECTION IN REINFORCED CONCRETE STRUCTURES: LITERATURE REVIEW AND BIBLIOMETRIC ANALYSIS	
	M. U. Khan, A. G. Bediwy	
	RC13 NUMERICAL INVESTIGATION ON THE MOMENT REDISTRIBUTION IN STATICALLY-INDETERMINATE REINFORCED CONCRETE BEAMS Fatma Attia, Raghda Mofeed, Hamed Salem	
	RC14 DEVELOPMENT OF FIBER REINFORCED CONCRETE BRIDG BARRIERS USING SYNTHETIC FIBERS AND STAINLESS STEEL M. Fadaee, K. Sennah	

9:00-10:30	TECHNICAL PARALLEL SESSIONS
9:00-10:50	Tuesday, 19 December 9:00-10:30 Hall C Session 2 (ST A)
Chairmen: Pro	of. Amin Saleh, Prof. Hesham Zieneldin, Prof. Mohamed A. Sakr
	ST1 PROGRESSIVE COLLAPSE POTENTIAL OF A MULTI-STORY STEEL BUILDING
	A. K. Ghamry, M. M. Abdel-Ghaffar, S. A. Mourad
	ST2 STUDYING THE EFFECT OF USING WATER TANKS AS TUNED LIQUID
	DAMPERS IN HIGH-RISE STRUCTURES
	M. S. Elnkhealy, K. M. Hafez, E. M. Lotfy, E. A. Erfan
9:00-10:30	ST3 LARGE SPAN SUSPENDED ROOF
9:00-10:30	Ph.D. Eng. Ahmed Almohamady
	ST4 NON-LINEAR ANALYSIS OF BENT GLASS CURTAIN WALLS.
	Abd El Kareim Sarah, Mahmoud Alnagar, M. Morsi El-Shami
	ST5 MEMBRANE PRESTRESS EFFECT ON EDGE CABLES STRESSES UNDER
	WIND LOAD
	H. A. Zieneldin, M. M. Heweity, M. Abdelnaby, E. Hendy

Tuesday, 19 December 2023

2:30 - 4:00	TECHNICAL PARALLEL SESSIONS
2:30 - 4:00	Tuesday, 19 December 2:30 - 4:00 Hall A Session 3 (RC C)
Chairmen: Prof. A	Ashraf Elzanaty, Prof. Tarek Ebeido, Prof. Ahmed Atta
	RC15 DEVELOPMENT OF EMPERICAL EQUATIONS FOR TRANSVERSE
	VERTICAL SHEAR LOADING FOR SHEAR KEY DESIGN IN SHEAR-
	CONNECTED CONCRETE BEAM BRIDGES DUE TO CANADIAN TRUCK
	N. Chatha, K. Sennah, F. Barakat
	RC16 EFFECT OF BEAMS ON THE PUNCHING SHEAR CAPACITY OF
	REINFORCED CONCRETE FLAT SLABS AT EGDE AND CORNER COLUMNS
	Hassan Bedeir, Hussein Okail, Marwan Shedid, Amr Abdelrahman
	RC17 INFLUENCE OF AXIAL TENSION ON THE SHEAR STRENGTH OF
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